

MICROSOFT®

The High Performance Software™

Microsoft® Access

Business Information Access Program

Microsoft Corporation
Gregg Corporation

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Welcome

Microsoft® Access is a communications program with advanced features that make communications both easy and efficient. With Access, you can connect to commercial information services and electronic mail services. You can use Access to connect to a mainframe or minicomputer system, such as those used by businesses and universities. Or, you can use Access to connect to another microcomputer — in an office or at home.

To use any of the major information services or mail services, you first subscribe. (For information, contact the service you want directly.) Once you have subscribed, Access makes connecting quick and easy.

Access makes using the service easier, too. The Custom Menus that Access provides for several major information and mail services are consistent across the services — you do not have to learn a new command interface each time you subscribe. You learn one interface, and Access translates your commands into the service's commands, saving you time and effort.

To make learning Access more convenient, the product includes some free connect time. See the Dow Jones News/Retrieval® and CompuServe® Executive Information Service booklets that came with Access.

To connect to another computer, such as a mainframe at your office or university or a friend's microcomputer, you need only coordinate the connection with the person in charge — then use Access to make the connection.

Contact your local telephone company for information about their charges.

Here are just a few of the things you can do with Microsoft Access:

- Research and collect financial, corporate, or scientific data.
- Create a stock portfolio and request an automatic update.
- Get current quotes on stocks and bonds.
- Find times, dates, and fares for airline flights.
- Read news stories, reviews, and other items of interest.
- Operate Access from a remote computer.

**Access makes
communications easy**

Access is versatile

- Check special interest group bulletin boards for the most current information on special topics.
- Use electronic mail services to transmit files to associates and clients across the country and around the world.
- Connect to a mainframe computer or a minicomputer and use your personal computer to emulate a VT100 or VT52 terminal on the mainframe system.
- Communicate with more than one host at a time (if you have more than one communications line, or X.PC protocol).
- Communicate directly with your friends and associates who also have personal computers and a communications program.

Custom Menus

Microsoft Access has several special features that make your communications easier. The most important of these are Custom Menus, which make it simpler to use the information and mail services.

Access provides Custom Menus

Ordinarily, you have to learn a different set of commands and procedures for each of the services to which you subscribe. To make it easier for you to get the information you want, Access provides Custom Menus of commands in the Microsoft command menu format. These easy-to-use commands replace the varied and sometimes complex command sequences for several of the major information and mail services.

Access provides Custom Menus for these information services:

- CompuServe Executive Information Service
- Dow Jones News/Retrieval
- NewsNet
- Official Airline Guide (OAG)

Through its Mail program, Access also provides Custom Menus for these electronic mail services:

- MCI Mail®
- Western Union's EasyLink

With the Mail program in Access, you can compose your mail with the built-in editor before you connect to a mail service, thus saving mail service charges. After you compose your mail, you use one command to send your messages and also retrieve any messages sent to you.

You can use Access itself to get electronic updates to Access Custom Menus. For details, see Appendix E, “Updating Custom Menus.”

Updates

Other Special Features

Other special features

Access has other special features that make communications easier and faster for you.

The Install Program The Install program helps you enter the hardware information Access needs, as well as telephone numbers and any necessary passwords for the information and mail services supported by Access.

Learn Command and Quickeys You can use the Learn command to record a sequence of commands and keystrokes that can be recalled with a single command. If you have long sequences of characters that you type often, you can assign them to one Quickey.

The Phonebook Access stores telephone numbers and settings for all your hosts in the Phonebook. This makes connecting a one-step process.

Microsoft Access Script Command (MASC) Language

Access features the MASC language so that you can write your own script programs.

Export You can use the file conversion utility, Export, to convert files into formats for the following programs:

- Microsoft® Multiplan®
- Microsoft® Chart
- Lotus 1-2-3®
- DIF (VisiCalc®) file format

Error-free File Transfer Access provides the XMODEM protocol to ensure accurate file transfer.

Simultaneous Connections Access supports X.PC protocol, which provides for multiple simultaneous connections through a single communications line, as well as error-free file transfer.

Editor You can use Access' Editor to compose and edit mail, script programs, and other text.

Cipher You can ensure the security of your files with Access' encrypting utility, Cipher.

About This Manual

This manual is organized into the following parts:

Welcome gives an overview of Microsoft Access. It also lists the equipment you need to use Access, describes the Access disks, and tells how to copy the Access disks to a hard disk.

Getting Started introduces the fundamentals of using Access. It tells you how to start Access, and how to use the Install program to enter your communications and hardware settings. It guides you through a sample communications session and gives you general instructions on how to review, capture, and print the information you receive.

Using Custom Menus tells you how to use each of the Access Custom Menus for the major information services: CompuServe Executive Information Service, Dow Jones News/Retrieval, NewsNet, and the Official Airline Guide. It also tells you how to use Access' Mail program, which provides Custom Menus for electronic mail services.

Using Access explains how to use some of the more advanced features of Microsoft Access, such as file transfer, Quickeys, the Phonebook, the Microsoft Access Script Command (MASC) language, and the Editor.

Reference contains detailed information about Access commands and messages. It describes each command in the Session and Phonebook menus, as well as the Microsoft Access Script Command (MASC) language. It also explains the messages that may appear on the screen while you are using Access.

Appendixes contain keyboard, modem, and hardware information and other technical information.

Glossary

Index

In addition, the *Access Quick Reference Guide* supplies clear summaries of important information.

Symbols Used in This Manual

Symbols in the manual

Throughout this manual:

- Square bullets indicate lists of actions, items, or topics.
- ▣ Boxed bullets indicate one-step actions.
- 1 Numbered lists indicate sequential steps for completing a task.

ALL CAPITALS indicate the names of documents, programs, and other files. When you type the names, you may use either uppercase or lowercase letters.

Italics indicate words and characters you type on the keyboard or see on the screen. Exception: in Chapter 18, “Writing Scripts,” and Chapter 21, “Microsoft Access Script Commands,” italics represent an element in a script statement that you replace with your own value.

SMALL CAPITALS indicate the names used for keys that have symbols on them.

What You Need

To use Microsoft Access, you need the following hardware and software:

Hardware

A computer A personal computer running the MS-DOS operating system. Your computer should have at least 256 kilobytes of memory and at least two disk drives.

Communications Hardware You can use any of the following:

- An internal modem card
- A standalone modem, an asynchronous communications card, and an RS-232-C cable
- To connect directly to another computer, an RS-232-C cable and an asynchronous communications card

You may also want a printer or a Microsoft Mouse for use with the Editor. Both are optional.

The manuals that come with your equipment should give you all the information you need to install and use this equipment. Be sure to review Appendix B, "Modems and Hardware," to ensure that your modem is set up correctly for Access.

Software

DOS To use Access, you need your personal computer Disk Operating System (MS-DOS or PC-DOS), version 2.0 or later.

Microsoft Access The Microsoft Access software.

Access Disks

For your convenience the Access disks are not copy protected. You can make backup copies of your disks, according to your Software License Agreement, and then store the original disks in a safe place to protect them from damage.

Microsoft Access software is contained in three disks:

Access Program Disk is used to start and run Access and contains the Access program files, modem support information, and the Phonebook.

Access Information Services and Utilities Disk contains the Install program; the Access Help file; and MACOPY, a program to copy your Access disks to a hard disk. It also contains the Custom Menu files for the information services (CompuServe Executive Information Service, Dow Jones News/Retrieval, NewsNet, and Official Airline Guide), as well as utility programs to export captured files to other productivity software, and to encrypt files for security.

Access Mail Program Disk contains the Mail program and the Editor.

Copying Access to a Hard Disk

If you have a hard-disk drive, you can keep all your programs and documents stored on your hard disk.

The Access Information Services and Utilities disk contains a program called MACOPY, which allows you to copy the Access disks to a hard disk. MACOPY works only with hard disks compatible with the IBM® Personal Computer DOS version 2.0 or later. You can run MACOPY as many times as you need.

MACOPY will let you know if there is a problem with available memory on your hard disk. It copies as many files as it has room for. Not all files are necessary to run Access. We recommend that you use MACOPY to copy Access disks, and then if there is not enough memory, delete the files you don't need.

To copy Access disks with MACOPY

To copy your Access disks to a hard disk with MACOPY:

- ❶ Put the Information Services and Utilities disk in drive A.
- ❷ Make sure the system prompt is A>. If it is not, type *a:* to change it.
- ❸ Type *macopy*
- ❹ Press the ENTER key.

MACOPY displays detailed instructions on how to copy the Access disks. If you have more than one hard disk, you can specify which hard disk you want to copy to.

When MACOPY has finished copying the disks, put a write-protect tab on each original and store in a safe place.

MACOPY creates the directory MSTOOLS on your hard disk. This directory contains all your Access files except ACCESS.COM, your login files (any files with the extension .LGN), and several others. These are stored in your root directory unless you specify a different directory when you use MACOPY.

To copy or delete Access files manually

Once you have used MACOPY to copy your Access disks and have been working with Access for a while, you may want to make some changes. For instance, you may realize that you need files that you didn't originally copy. You may decide to delete some files from your hard disk to make more room on it.

Access lets you manually copy files to or delete files from your hard disk. You can use the DOS DIR command to see a directory of the files currently on your hard disk. You can use the DOS COPY and DEL commands to copy and delete files. The following tables will help you decide which files to copy or delete.

Note The following tables reference two directories: MSTOOLS and ACCESS. You may have named ACCESS something different when you used MACOPY.

Files You Must Copy to Run Access

To do this	Copy this file	From	To this directory
Run Access	ACCESS.COM	Access Program disk	ACCESS
Run Access	ACCESS.MDM ACCESS.OVL ACCESS.PGM ACCESS.PHB	Access Program disk	MSTOOLS
Use Help	ACCESS.HLP	Access Information Services and Utilities disk	MSTOOLS
Run Install	ACCESS.INS *.TPL	Access Information Services and Utilities disk	MSTOOLS

Use This Table to Decide which Additional Files You Want

To do this	Copy this file	From	To this directory
Run Access under Micro-soft Windows	ACCESS.PIF	Access Information Services and Utilities disk	ACCESS
Read update information on Access	README.MDM	Access Information Services and Utilities disk	MSTOOLS
Use the encrypt feature	CIPHER.COM	Access Information Services and Utilities disk	ACCESS
Export data to other application programs	EXPORT.COM	Access Information Services and Utilities disk	ACCESS
Use the DowJones Custom Menu	DOWJONES.*	Access Information Services and Utilities disk	MSTOOLS
Use the CompuServe Custom Menu	COMPUSV.*	Access Information Services and Utilities disk	MSTOOLS
Use the NewsNet Custom Menu	NEWSNET.*	Access Information Services and Utilities disk	MSTOOLS
Use the Official Airline Guide Custom Menu with DowJones or CompuServe	OAG.* AIRPORTS.DAT	Access Information Services and Utilities disk	MSTOOLS

To do this	Copy this file	From	To this directory
Use MCI or Western Union Services	MCIMAIL.TPL MCIMEP1.TPL WSTUNION.TPL	Access Information Services and Utilities disk	MSTOOLS
Use X.PC protocol	XPC.COM	Access Information Services and Utilities disk	ACCESS
	XPCPAD.DES	Access Information Services and Utilities disk	MSTOOLS
Use the Editor	NOTEPAD.COM NP.*	Access Mail Program disk	ACCESS
Use the Mail program	All files except NOTEPAD.COM and NP.*	Access Mail Program disk	MSTOOLS
Use the Mail program	SORT.EXE	Access Mail Program disk	ACCESS

Making the Program Disk Self-starting

To make it easier to start Access from a floppy-disk drive, you can copy certain files from your DOS disk to your Access Program disk, then start the system and the program at the same time.

To make the Program disk self-starting

- 1 Start DOS as you would normally, with the DOS disk in drive A.
- 2 Insert the Access Program disk in drive B.
- 3 Type *sys b:*
- 4 Press the ENTER key.
The message "System transferred" appears.
- 5 Type *copy command.com b:*
- 6 Press the ENTER key.

DOS copies COMMAND.COM to the disk in drive B.
If you have an AUTOEXEC.BAT or CONFIG.SYS file, or any device drivers such as RAMDRIVE.SYS, you may want to copy these to the Access Program disk as well. Copy these files the same way you copied COMMAND.COM.

Now you can use your Access Program disk to start your computer, without first using your DOS disk.

Go on now to Chapter 1, “Using Access the First Time,” to find out how to start Access and go through the Install procedure. Chapter 1 also contains a sample communications session that you may find helpful.

The following section, “Ways to Start Access,” summarizes the different ways you can start Access, depending on what you want to do. Refer to this section as you need to after you have read Chapter 1.

Ways to Start Access

To start Access using two floppy-disk drives:

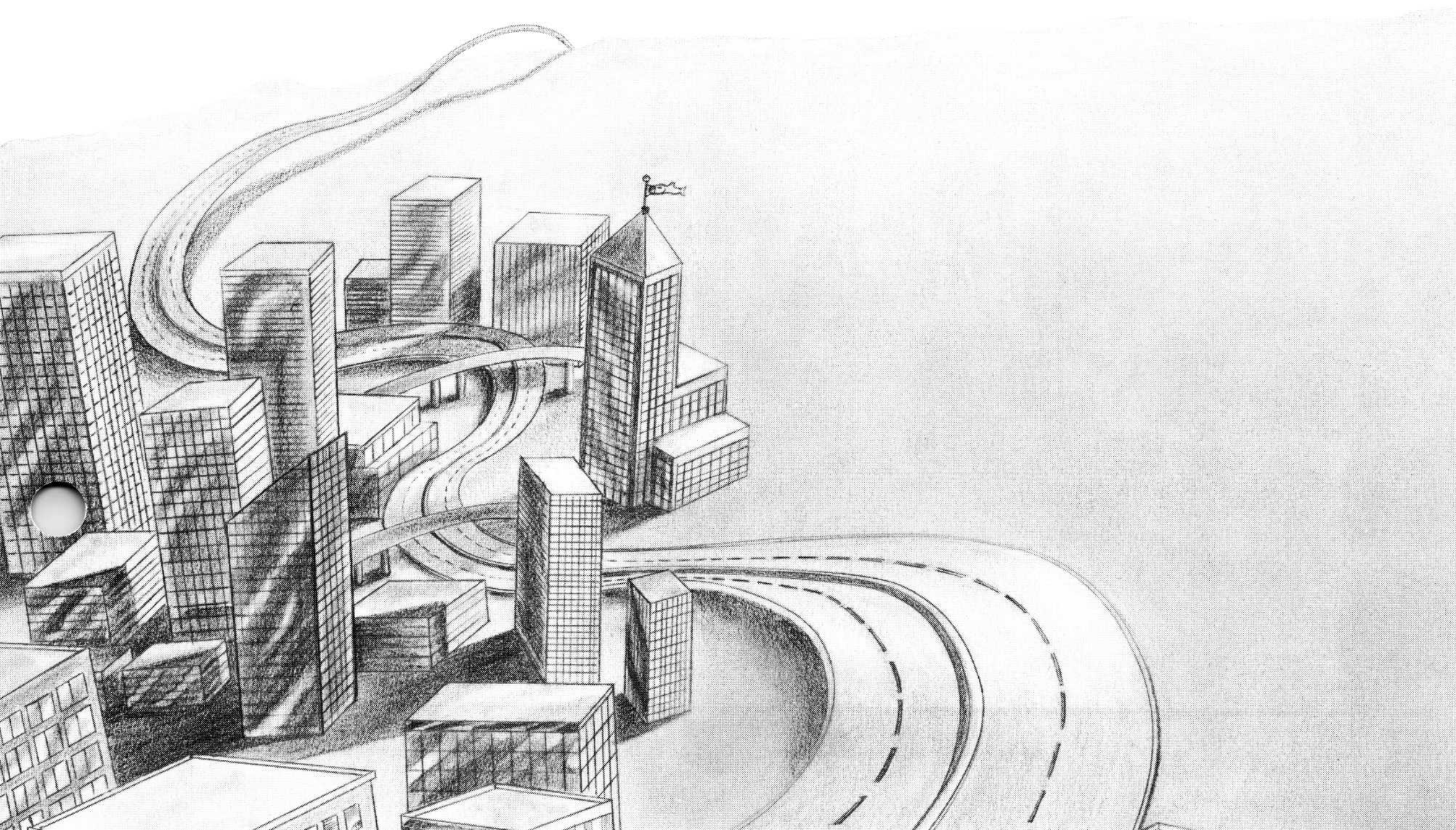
- 1 Put the Program disk in drive A.
- 2 If you want to connect to an information service or have online Help available, put the Information Services and Utilities disk in drive B; if you want to connect to Mail, put the Mail Program disk in drive B.

Whether your computer has two floppy-disk drives or a single floppy-disk drive and a hard disk, you can start Access in any of the following ways.

To start Access

To start Access...	Type this:
The first time	<i>access</i>
And go through Install again	<i>access /install</i>
And connect to a host entered in the Phonebook	<i>access dowjones</i> (for example)
And run a script file	<i>access /mail</i> (for example)
And connect to a host entered in the Phonebook on a specific communications line	<i>access dowjones /2</i> (for example)

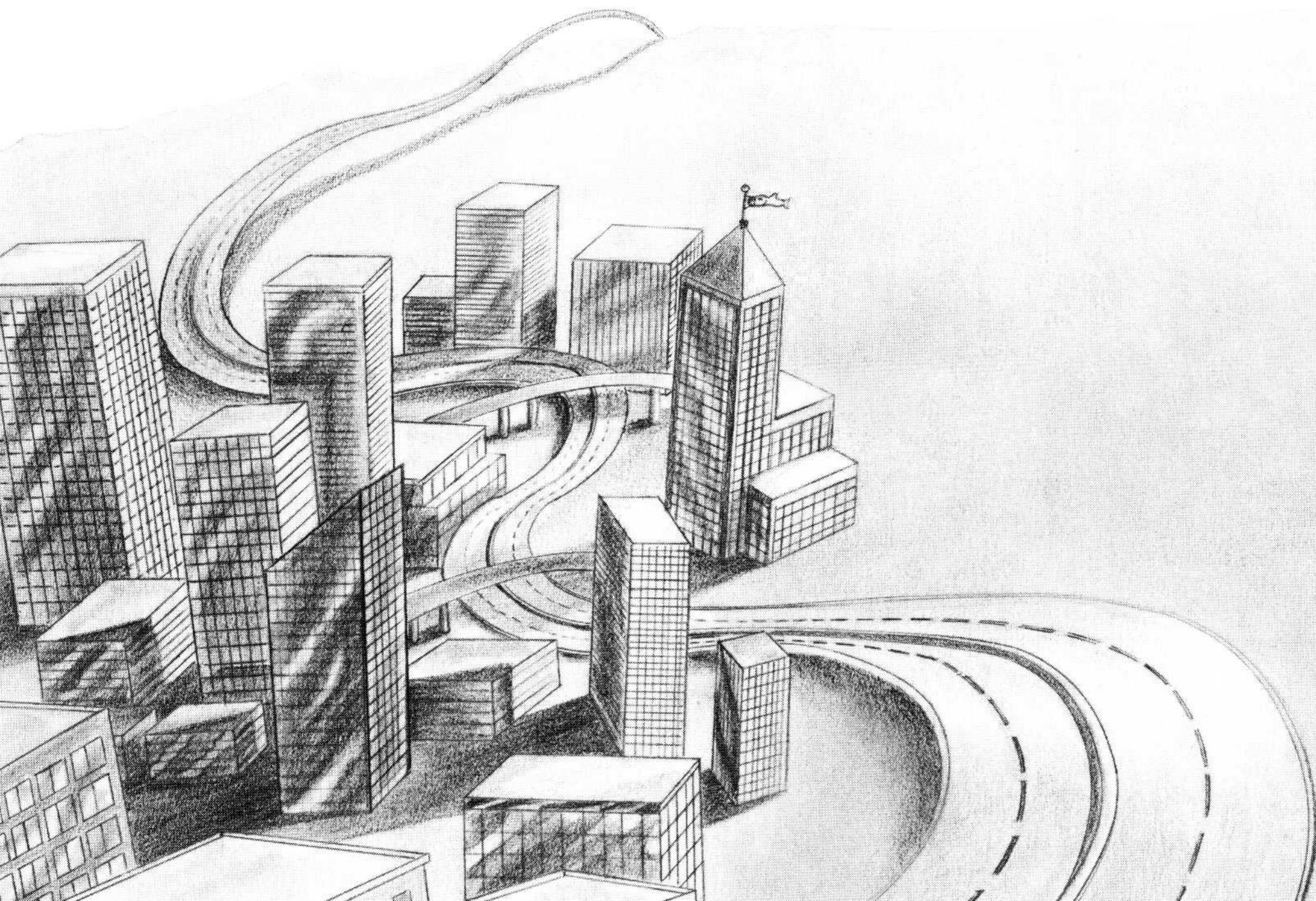
Getting Started

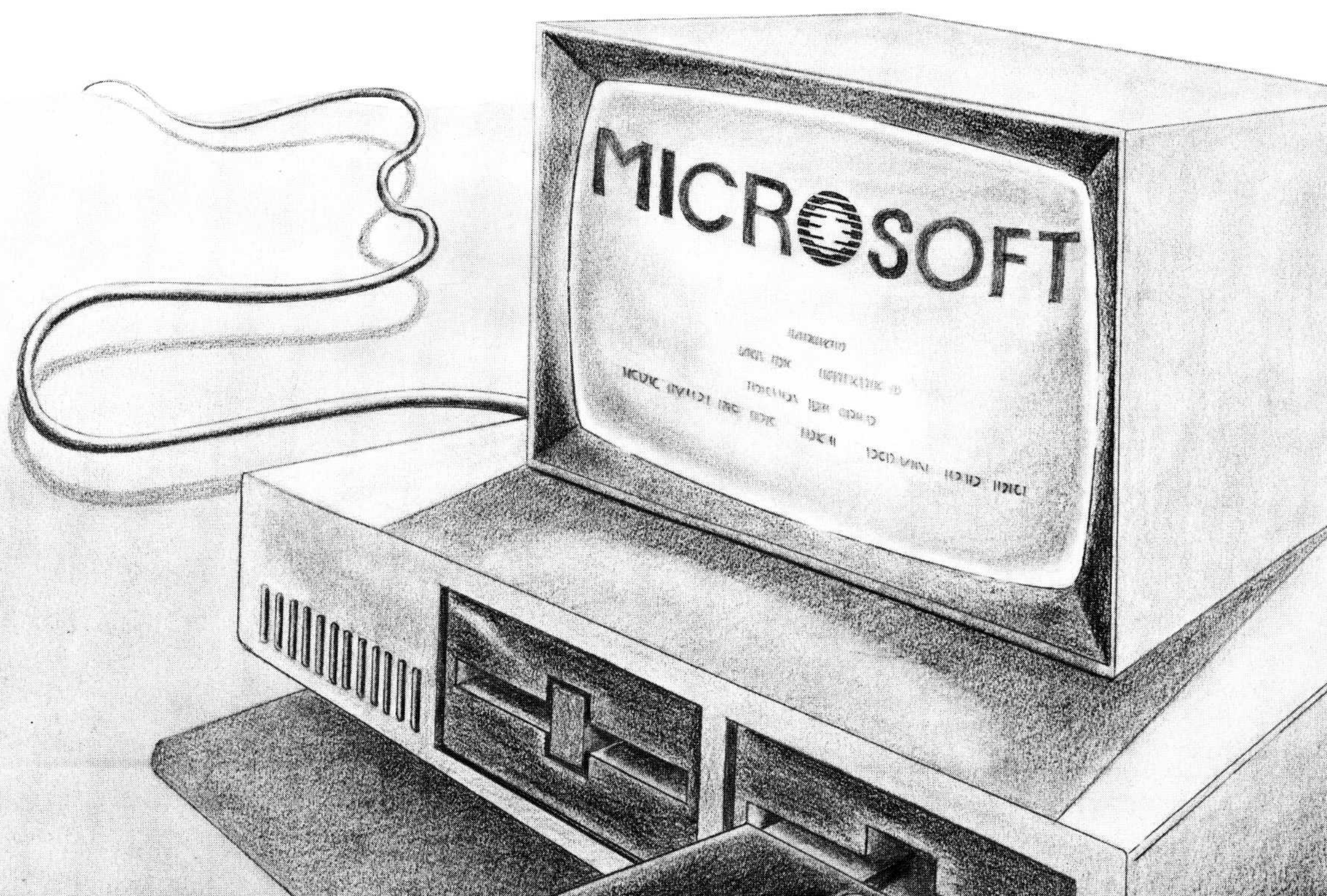


Getting Started

The three chapters of “Getting Started” introduce some fundamentals of using Microsoft® Access.

- Chapter 1, “Using Access the First Time,” lists the information you need before starting Access, then tells you how to start Access and go through the Install procedure. This is followed by a sample communications session that teaches the basics of using Custom Menu commands.
- Chapter 2, “Connecting to Other Computers,” gives you more information on using the Connect command, and tells how to connect to different kinds of hosts under different circumstances. It also introduces the Mail Custom Menu, and tells you how to get online Help when you need it.
- Chapter 3, “Conducting Communications Sessions,” tells you how to pause during a communications session, review information, capture it to a file, and print it. This chapter also includes information about managing your files.





1 Using Access the First Time

The first time you start Microsoft Access, the Install procedure begins automatically. Install gives you an easy question-and-answer format in which to enter information about your modem and the host you want to connect to.

Note In this manual, the word *host* can mean either a mainframe or a minicomputer. For full definitions of this and other terms, see the Glossary at the end of the manual.

Access saves modem and host information, so you don't have to reenter it each time you run Access.

Install will not automatically run the next time you start Access. However, if you want to use Install to change or add modem or host information, you can run Install again by typing *access /install* when you start Access.

Information You Need to Start

You need the following information at hand before you start Access for the first time:

- Which communications line you will use (COM1 or COM2) if you have more than one.
- The brand name of your modem and what type it is: smart modem (automatic-dial) or acoustic coupler (manual-dial).
- What type of telephone line you have and the private branch exchange (PBX) dial prefix, if any.

Check with your telephone company to find out whether you have a touch-tone or rotary-dial telephone line. Even if you are using a rotary-dial telephone, it may operate on a touch-tone line. Also find out if you are using a PBX system which requires you to dial a prefix, such as 9, to get an outside line.

Information you need

- Telephone number and login information.

This is provided by the service or host computer. Login information includes passwords and other identification information.

- The baud rate (communication speed) you will use for this host.

The service or host provides this information in its subscription literature.

Both Dow Jones News/Retrieval and CompuServe Executive Information Service give you some free connect time for your convenience in learning Access.

To get the local telephone number and password for your free connect time with Dow Jones News/Retrieval, call the customer service representative listed in the Dow Jones News/Retrieval booklet that came with Access.

For the CompuServe Executive Information Service local telephone number and password, look in the CompuServe booklet that also came with Access.

Once you have the information you need, you are ready to start Access.

Starting the Access Program

To start Access with two floppy-disk drives

To start Access on a computer with two floppy-disk drives:

- 1 Put your IBM DOS disk in drive A.

or

If you have made your Access Program disk self-starting, put this in drive A instead. For instructions on making your Access Program disk self-starting, see "Access Disks."

- 2 Put the Access Information Services and Utilities disk in drive B.

This disk contains the Access Help file and the Install program.

- 3 Turn your computer on.
- 4 Respond to the date and time prompts, if they appear.
- 5 If your IBM DOS disk is in drive A, remove it now and put the Access Program disk in drive A.
- 6 Type *access* at the A> prompt.
- 7 Press the ENTER key.

If your computer has a hard disk, you can copy Access onto the hard disk and start it from there. For instructions, see “Access Disk.”

To start Access from a hard disk:

- 1 Change to the directory that contains the Access program file, ACCESS.COM

If you used MACOPY to copy Access to your hard disk, this is the directory you specified in MACOPY.

- 2 Type *access*
- 3 Press the ENTER key.

There are quick ways of starting Access when you know what script or Custom Menu you want. See “Ways to Start Access.”

To start Access with a hard disk

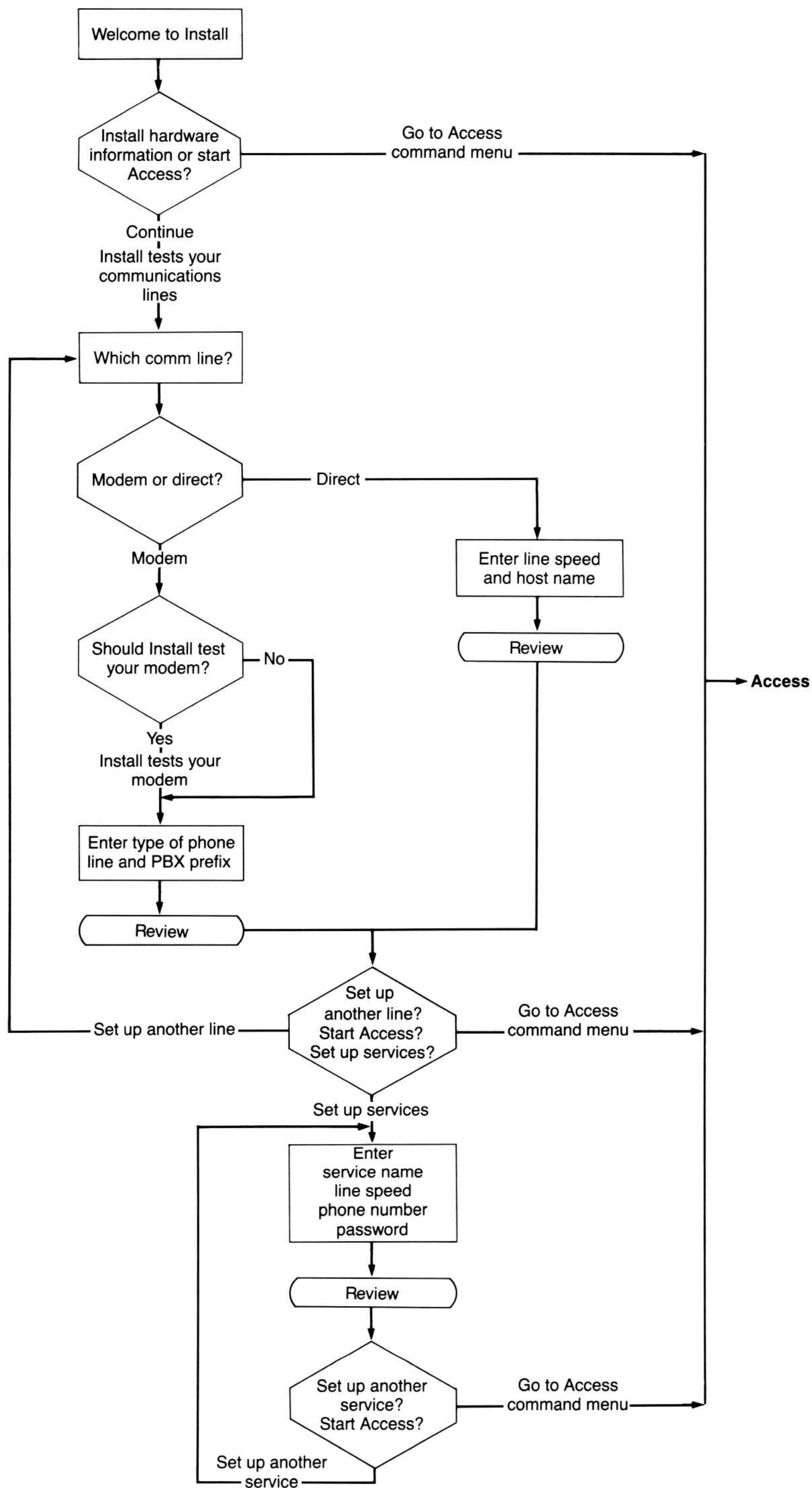
Using Install

When you start Access for the first time, you will see the first screen of the Install procedure. Install helps you enter modem and host information to get ready for connection.

Install explains each step and prompts you for information. In some instances, it gives you lists of options to choose from. As you complete each step, Install directs you to the next.

The following diagram is a “road map” through Install.

1.1 Install Procedure



Access saves the information you enter in Install. You need to reenter it only if you change your equipment or want to connect to a new host. Access saves host information in the Phonebook, so you can refer to it for future connections. For more information, see Chapter 2, “Connecting to Other Computers.”

The sample session with Dow Jones News/Retrieval below teaches you how to connect, use a Custom Menu to get some information about stock prices, log off, and quit Access. If you want to work through this session, set up the Dow Jones service last.

When you are finished setting up services, leave Install by choosing to start Access from the last Install screen.

If you do not want to work through the sample session after you finish Install, go on to Chapter 2, “Connecting to Other Computers,” for information on connecting.

Sample Session

In the sample session that follows, you will use some of your free connect time with Dow Jones News/Retrieval to learn some fundamentals of using Access. You will learn how to:

- Choose a command from the Session menu
- Connect to a service
- Choose a command from the Custom Menu
- Fill in command fields and carry out commands
- Log off from the service
- Quit Access

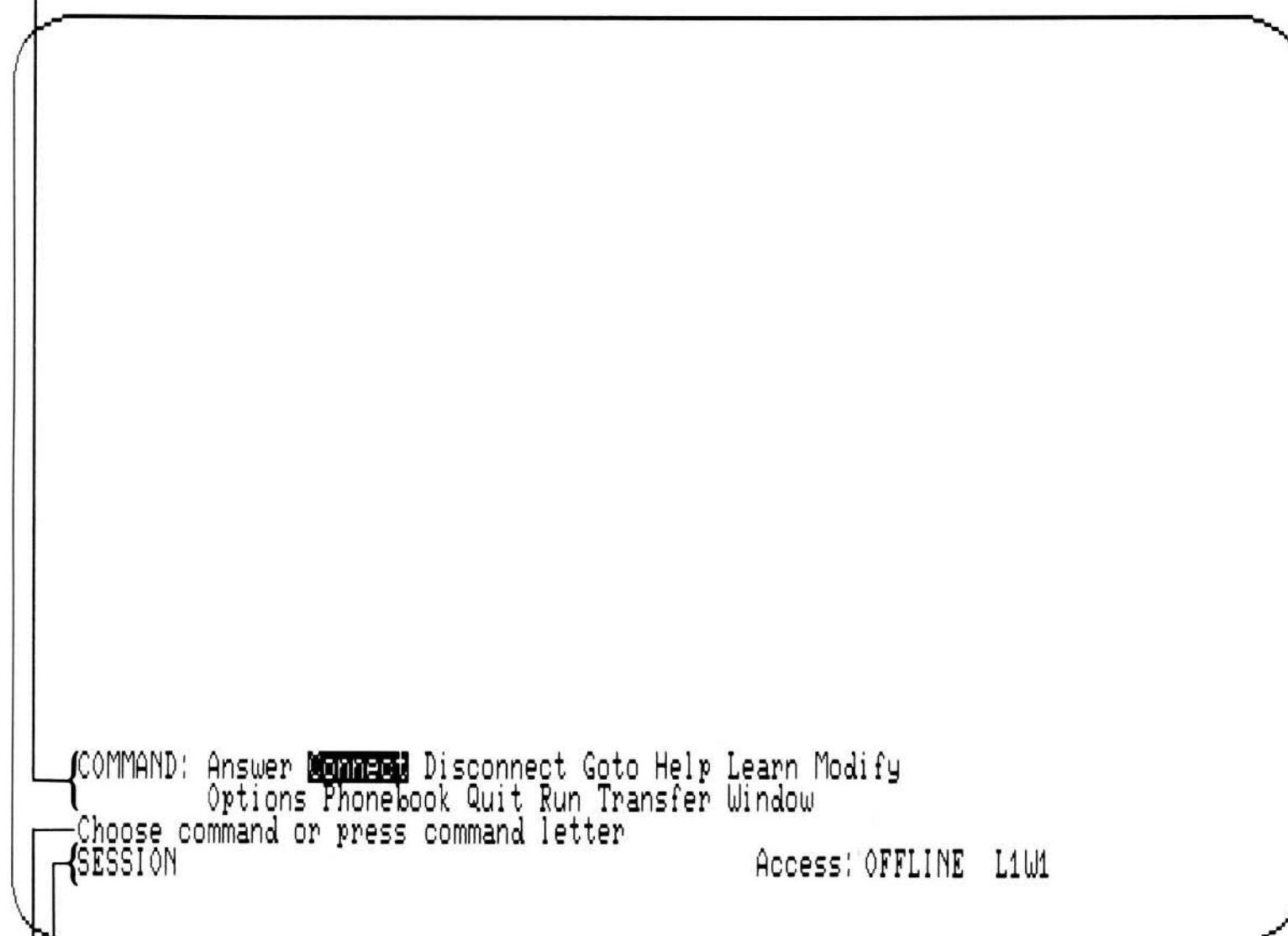
When you finish the session, you will know enough to begin using Access for your own work.

If you have chosen to start Access from the last Install screen, you now see the Access Session menu. The status line at the bottom of your screen contains the word *OFFLINE*, which tells you that you are not connected at the moment.

Note Most services you connect to will automatically log you off (or “time out”) if they don’t receive input from you for a period of time — usually from two to five minutes, depending on the service. You may want to skim the next few pages of the sample session so you are somewhat familiar with it before you connect to Dow Jones.

If you do happen to time out, Dow Jones will display a message saying that you have been dropped by the system. Use the Logoff command from the Custom Menu to return to the Session menu, then use the Connect command from the Session menu to connect to Dow Jones again. See the instructions for logging off at the end of this chapter for information on using the Logoff command.

Command lines



Status line

Message line

Choosing a command from the Session menu

Note that the Connect command is highlighted in the Session menu. You use the Connect command to connect to a host. Because this command is already highlighted, you need only press the ENTER key to choose the command. Choose the Connect command now:

- Press the ENTER key.

The Connect command fields appear on your screen. These command fields are already filled in with information for the last service you set up in Install.


```
CONNECT to name: dowjones  phone number: 285-0109
      at speed: 1200      on comm line: 1      learn login: Yes(No)
```

If the command fields on your screen do not look like this, turn ahead to “Using the Connect Command” in Chapter 2, “Connecting to Other Computers,” for instructions on selecting Dow Jones from the Phonebook.

To carry out the Connect command and connect to Dow Jones:

- Press the ENTER key.

You can see (and may be able to hear) the connection being made. The message “modem response,” followed by your modem’s response characters, appears in the message line as Access activates your modem. The word *OFFLINE* disappears and the name of the host to which you are connecting appears — in this case, *DOWJONES*.

To connect to a service

SESSION

Access: DOWJONES 00:00:58 L1W1

What happens next depends on the kind of modem you have:

- If you have an automatic-dial modem, the digital clock at the far right of the status line counts down from 60 seconds until you connect. If your modem has a speaker, you may hear the modem dial the telephone number, the ring as the service answers, and the high-pitched tone that signals your modem to complete the connection.
- If you have a manual-dial modem, Access will ask you to dial the local Dow Jones telephone number.

Note Sometimes a connection doesn’t succeed the first time. This doesn’t necessarily mean anything is wrong with your software or hardware. If the connection fails, press the Esc key and try again, starting with the Connect command.

When you connect, you can watch Access automatically log you in to Dow Jones, using the information you entered in Install. If you didn’t enter a date when you started your computer, Dow Jones asks you to enter today’s date. When you have done so, the Session menu disappears and a digital clock displays your connect time in hours, minutes, and seconds. The Custom Menu for Dow Jones News/Retrieval replaces the Session menu.


```

COMMAND: Bypass Capture Help Logoff Quotes Read Search Travel
Select option or type command letter
DOW JONE          Scr          Access: DOWJONES 00:00:41 L1W1

```

This menu is similar to the Custom Menus for the other information services.

Choosing a command from a Custom Menu

Now you will use the Quotes command to get information on stock prices. The Quotes command is already highlighted, so you can choose it the same way you chose the Connect command:

- Press the ENTER key.

Instead of command fields, another menu of commands appears.

```

QUOTES: Averages Current Historical Portfolio Lookup

```

The Current command is already highlighted in the Quotes menu. However, it might be more interesting to use the Historical command to get some historical information about a stock. Choose the Historical command:

- 1 Press the spacebar to highlight the Historical command.
- 2 Press the ENTER key.

The Quotes Historical command fields appear.

```

QUOTES HISTORICAL symbol: 
                  period:(Daily)Monthly Quarterly
                  start date: 3/16/85 end date: 3/16/85
                  today's date: 3/16/85
                  type:(Stock)Warrant

```

If you chose a different command by mistake, press the Esc key to cancel the command and return to the main Custom Menu so you can start over.

Filling in command fields

Now you can specify the stock you are interested in. The first command field, “symbol,” is highlighted. This means that you can enter information in it.

- 1 Type *ibm* in the “symbol” command field.

If you make a mistake while typing, press the BACKSPACE key to erase what you typed, then retype the correct response.

- 2 Move to the "period" command field by pressing the TAB key.
- 3 "Daily" is highlighted, which means it is the proposed response. Accept it by pressing the TAB key to move to the "start date" field.
- 4 Enter a date in the "start date" field (for example, 8/13/85) and move to the "end date" field.
- 5 Enter a date in the "end date" field (for example, 8/13/85). Or, you can accept the proposed response of the current date.
- 6 Accept the rest of the proposed responses by pressing ENTER to carry out the command.

The message "Accessing Historical Quotes..." appears, and you can see the Dow Jones commands that Access is sending for you. When Dow Jones has found the information you asked for, it scrolls onto your screen. Some of the information may scroll off the top of your screen, but don't worry about that now. For details on reviewing information that has scrolled off your screen, see Chapter 3, "Conducting Communications Sessions." When Access displays the last of the information, the main Custom Menu reappears.

STOCK QUOTE REPORTER SERVICE

STOCK IBM

DATE	HIGH	LOW	CLOSE	VOL(100/S)
02/28/85	134 1/2	132 3/4	134	8824
03/01/85	136 3/4	134	135 7/8	13859
03/04/85	136 3/8	134 3/8	135	8901
03/05/85	135 7/8	134 5/8	135	10133
03/06/85	135 1/2	132 3/4	132 7/8	10313
03/07/85	133 3/8	130	130 3/8	17575
03/08/85	131	129 1/8	129 5/8	17232
03/11/85	131 3/4	129 3/4	131 1/2	10514
03/12/85	132 1/2	131	131 7/8	8796
03/13/85	132	129 3/8	130	11948
03/14/85	130 3/8	128 3/4	128 7/8	12718
03/15/85	130	128	128 5/8	11974

COMMAND: Bypass Capture Help Logoff **Quotes** Read Search Travel

Select option or type command letter
DOW JONE Scr

Access: DOWJONES 00:04:53 L1W1

Logging off

To log off from Dow Jones now, you'll use the Logoff command. You could choose the command the same way you chose Quotes Historical, by pressing the spacebar and then the ENTER key, but there's a quicker way:

- 1 Choose the Logoff command by pressing its initial letter, L
Access asks you to confirm your decision to log off.
- 2 Press Y to confirm.

Access logs you off and disconnects you from Dow Jones News/Retrieval. The Session menu reappears.

To quit Access

Now that you are finished with the sample session, you can quit Access.

- 1 Choose the Quit command.
Remember, you can choose a command by highlighting it and pressing the ENTER key, or by pressing its initial letter.
Access asks you to confirm your decision to quit.
- 2 Press Y to confirm.

Access returns you to the DOS prompt.

The sample session you have just completed is typical of those you would have with the other services. The Custom Menus provided by Access are similar for the other services, so it is easy to use any of them after you have learned to use one. Each chapter in "Using Custom Menus" explains one of the Custom Menus.

Chapter 2, "Connecting to Other Computers," gives you more information on using the Connect command, getting Help, disconnecting, and quitting.

Chapter 3, "Conducting Communications Sessions," explains how to do tasks such as pausing, reviewing, capturing to a file, and printing the information you receive during a session.

Summary: Using Access the First Time

If you want to...	Do this:
Start Access	
■ (floppy-disk drive)	Put the Program disk in drive A. Put the Information Services and Utilities disk in drive B. Type <i>access</i>
■ (hard-disk drive)	Type <i>access</i>
Highlight a command	Press the spacebar to go forward. Press BACKSPACE to go backward.
Choose a command	Highlight the command and press ENTER or press the first letter of the command name.
Cancel a command	Press Esc.
Move highlight from field to field	Press TAB to go forward. Press BACKTAB (SHIFT-TAB) to go backward.
Move highlight among items in a field	Press the spacebar to go forward. Press BACKSPACE to go backward.
Choose a response	Highlight the response and press ENTER or press the first letter of the response name.
Correct a response you just typed	Press BACKSPACE and retype.

2 Connecting to Other Computers

When you finish Install and your sample communications session, or whenever you start Microsoft Access after the first time, you see the Session menu.

Command lines

```
COMMAND: Answer Connect Disconnect Goto Help Learn Modify  
          Options Phonebook Quit Run Transfer Window  
Choose command or press command letter  
SESSION                                     Access: OFFLINE L1W1
```

Status line

Message line

Note that the Connect command is highlighted, and the message line displays this message:

Choose command or press command letter

The message line tells you what to do next or how to enter information; it also displays error messages.

For explanations of messages, see Chapter 22, “Messages.” Below the message line is the status line. The word *SESSION* at the far left of the status line tells you that you are in the Session menu right now. The information in the status line changes depending on what you are doing. For example, the status line displays *Cpt* while you are capturing information to a file, or *Prn* while you are printing.

Information You May Need to Connect

Before you can connect to a host, you may need certain information.

To connect to...	You need to know about:
An information service for which Access has a Custom Menu	The Connect command and the Custom Menu. See Chapter 20, “Session Menu and Phonebook Commands” and the appropriate chapter in “Using Custom Menus.”
An information service for which Access has no Custom Menu	Service login requirements.
An electronic mail service via the Access Mail program	Using the Mail program. See Chapter 8, “Mail.”
A mainframe or minicomputer (other than a service)	System login requirements.
Another microcomputer	Agreement on communications settings.

Information Access May Need to Connect

Before you can connect to a host, Access also needs certain information, including communications settings, telephone number, and other details.

You may have supplied this information through the Install program, which is discussed in Chapter 1, “Using Access the First Time.” Each host you set up using Install is entered in the Phonebook; when you want to connect to it, you simply select the Phonebook entry.

You can change or add to this information by going through Install again, or by using Access commands. You will rarely need to change communications settings, since Access supplies settings that are appropriate for most hosts. For information on changing communications settings, see Chapter 9, “Changing Modem and Communications Settings.” For information on the Phonebook, see Chapter 13, “Maintaining the Phonebook.”

If you haven’t already supplied the necessary information using Install, you can provide it through the Connect command.

Using the Connect Command

Using the Connect command

To choose the Connect command:

- Press C

You will see the Connect command fields.

```
CONNECT to name: █      phone number:
      at speed: 1200    on comm line: 1      learn login: Yes(No)
```

You can connect to a host already listed in the Phonebook, or type in the information to connect to a new host. You can add new information to the Phonebook if you wish.

Note To use the Access Mail program, you do not use the Connect command. For details on using the Mail program, see Chapter 8, “Mail.”

Selecting a host from the Phonebook

If you want to connect to a host in the Phonebook, you select it from the Phonebook. Access fills in all of the command fields and you simply carry out the command. To select a host from the Phonebook:

- 1 Type the name of the host you want in the “to name” field, or press any direction key to display the Phonebook.

The direction keys are the arrow keys on the keypad at the right of your keyboard. Once you have displayed the Phonebook, use the UP or DOWN direction keys to highlight the host you want.

```

1 TURNET Turnet.....285-0109 <1200>
2 MCI MCI Mail.....282-3077 <1200>
3 COMPUSV CompuServe Executive Information Service.....241-9111 <1200>
4 DOWJONES Dow Jones News/Retrieval.....285-0109 <1200>
5 EASYLINK EasyLink Mail.....1-800-325-4112 <1200>
6 OAG Electronic Edition.....285-0109 <1200>
7 NEWSNET NewsNet.....285-0109 <1200>

```

```

CONNECT to name: TURNET phone number: 285-0109
          at speed: 1200 on comm line: 1 learn login: Yes(No)
Enter name or select from list
SESSION Access: OFFLINE L1W1

```

As the highlight moves from line to line in the Phonebook, Access fills in the remaining command fields with information about each host in succession.

- 2 When the host you want is highlighted, press the ENTER key to carry out the Connect command and connect to the host.

Typing in information about a new host

When you want to connect to a host not yet entered in the Phonebook, you need to fill in the Connect command fields with the information Access requires to connect you.

- 1 Type the name of the host.

The name can be one to eight characters long and cannot include any spaces. You can leave this field blank if you want to enter only a telephone number.

- 2 Move to the next command field by pressing the TAB key.

If you need to back up, you can move to the previous command field by pressing the BACKTAB key (SHIFT-TAB).

- 3 Type the telephone number of the host in the “phone number” field. For example, *1-206-555-5555*

If you are connecting directly to a host rather than using a modem, type *none* in this field.

If you make a mistake, press the BACKSPACE key to delete the characters, then retype them.

- 4 Press the TAB key to move to the next field.

- 5 Type the baud rate appropriate for both your modem and the host in the “at speed” field. Or press any direction key to display a list.

A speed of 300 or 1200 is appropriate for most modems. Press the direction keys to highlight your choice.

- 6 Press the TAB key to move to the next field.

- 7 Type the number of the communications line you intend to use in the “on comm line” field.

If the response is already filled in and is correct, simply press the TAB key to move to the next field. If the response is incorrect, change it by typing the response you want, then tab to the next field.

- 8 If you want Access to save this login sequence, choose “Yes” in the “learn login” field.

If you choose “Yes,” Access will also learn your login (including password) and store it for future use. See Chapter 11, “Automating Communications Sessions,” for details about automating your login sequence.

- 9 When the command fields are filled in, carry out the Connect command by pressing the ENTER key.

Note To cancel a command before you carry it out, press the Esc key.

Adding the new host to the Phonebook

If you are connecting to this host for the first time, Access will ask if you want to add the new name to the Phonebook. To add the name to the Phonebook, press Y.

If you press Y, Access stores the name of the host, the telephone number, and the settings in the Phonebook. Access stores login information in a file named for the host followed by an .LGN filename extension.

For more information about filling in command fields, as well as editing responses in them, see Chapter 20, "Session Menu and Phonebook Commands."

Connecting

What happens after you carry out the Connect command depends on whether you are connecting with a modem or connecting directly (without a modem). If you are connecting with a modem, either you dial the host's telephone number or the modem dials. If you are connecting directly, there is no dialing period; Access connects you to the host.

If you did not go through the Install program, you will need to enter communications settings (telephone type, dial prefix, and modem name) using the Options command from the Session menu. See Chapter 20, "Session Menu and Phonebook Commands," for a description of the Options command.

Smart Modem If you are using a smart modem (automatic-dial), Access dials the number automatically. The modem response appears in the message line, and a digital clock in the status line counts down from sixty seconds.

```
CONNECT to name: DOWJONES    phone number: 285-0109
          at speed: 1200      on comm line: 1          learn login: Yes(No)
Modem response: ?ATS0=1.....OK....ATDT285-0109.....DIALING...T2850109
SESSION                                     Access: DOWJONES 00:00:58 L1W1
```

If Access cannot connect within sixty seconds, the Session menu reappears and you can try again.

Manual-dial Modem If you are using an acoustic coupler (manual-dial modem), Access asks you to dial the number. If the connection fails, press the Esc key. The Session menu reappears and you can try again.

After You Connect

When the host answers your call, the digital clock in the status line displays your connect time in hours, minutes, and seconds. The Session menu disappears. What replaces it depends on whether or not you connect to a service for which Access has a Custom Menu.

Custom Menu When you connect to a host for which Access has a Custom Menu, the Custom Menu replaces the Session menu, and the display for that service appears. Access logs you in automatically. The screen you see when you connect with a Custom Menu will be similar to this (the Custom Menu for Dow Jones News/Retrieval):

```

please log in! DOWJ;
tc> host is online

WHAT SERVICE PLEASE????
DJNS

ENTER PASSWORD
#####
DOW JONES NEWS/RETRIEVAL
COPYRIGHT (C) 1985
DOW JONES & COMPANY, INC.
ALL RIGHTS RESERVED

GEORGETOWN, NORTH CAROLINA
ADVANCE IN NCAA BASKETBALL
TOURNAMENT, SEE //SPORTS.
DATA-BASE LIST IN //MENU.
ENTER QUERY

COMMAND: Bypass Capture Help Logoff Quotes Read Search Travel

Select option or type command letter
DOW JONE          Scr                      Access: DOWJONES 00:01:01 L1W1

```

No Custom Menu When you connect to a host for which Access has no Custom Menu, the Session menu disappears. You can now log in. Once you have logged in, the display for that host appears.

You can create an automatic login for a host. For details, see Chapter 11, “Automating Communications Sessions.”

A Microcomputer When you connect to another microcomputer, the Session menu disappears. Usually, you don't have to log in; however, some communications programs, like Access, can be set to request a password. If you want to control another computer which is also running Access, see Chapter 16, "Answering Calls and Using Remote Control," for information on setting up.

Once you have logged in, you can conduct your communications session as you wish.

Closing a login file

If you chose "yes" in the "learn login" field of the Connect command you need to close the login file before you continue:

- ❶ Press the MENU key (F10) to return to the Session menu.
- ❷ Choose the Learn command. In the "action" field, choose the proposed response, "Close."
- ❸ Press the ENTER key.

Access stores your login sequence in the login file and will use it every time you connect to this host.

Disconnecting

Disconnecting

When you are finished using a service, you will want to log off and disconnect.

Custom Menu To disconnect from a host for which Access has a Custom Menu:

- ❶ Choose the Logoff command from the Custom Menu.
Press L, or press the spacebar to highlight Logoff and press the ENTER key.
Access asks you to confirm your decision to log off.
- ❷ Press Y to confirm.

Access logs you off, disconnects you from the service, and returns you to the Session menu.

No Custom Menu To disconnect from a host for which Access does not have a Custom Menu:

- ❶ Log off from the host.
- ❷ Press the MENU key (F10) to display the Session menu.
- ❸ Choose the Disconnect command.

If you are using an acoustic coupler (manual-dial modem), hang up the phone handset.

Getting Help

If you have a question while you are using Access, you can get online help by using the Help command.

If your computer has two floppy-disk drives, make sure the Information Services and Utilities disk is in drive B before you ask for Help.

- 1 Press the MENU key (F10) to display the Session menu.
- 2 Choose the Help command.
Access will display the first Help screen.
- 3 Choose any of the Help commands to move through the Help file to the information you want.
- 4 When you are finished using Help, choose the Resume command to return to your session.

You can also get help on a highlighted command or command field in the Session menu:

- 1 Highlight the command or field you are interested in.
- 2 Press the HELP key (Alt-h).

Access will display the Help screen that contains information about the command or field you highlighted.

The Help command

The HELP key

Quitting Access

You can use the Quit command to leave Access.

- 1 Choose the Quit command from the Session menu.
- 2 Access asks you to confirm. Press Y to quit. You can cancel your decision by pressing the Esc key.

There may be times when it is convenient to stay connected to the host even though you quit Access (when there is no cost involved, for instance). If you are connected when you choose Quit — either because you neglected to hang up or because you

Quitting Access

want to remain connected even after leaving Access — Access displays another prompt asking you whether or not to disconnect the line. Press Y to disconnect or N to remain connected after you quit.

If you have changed any communications settings or entered a new host, Access asks if you want to save this information permanently in the Phonebook. Press Y to update your Phonebook or N to leave the Phonebook unchanged.

Once you have responded to the prompts, the Access program ends.

The next chapter, “Conducting Communications Sessions,” describes some of the tasks you may want to perform during a session, such as pausing, reviewing, saving to a file, printing, and viewing files.

Summary: Connecting to Other Computers

If you want to...	Do this:
Connect to a host	Use the Connect command.
Get Help	Use the Help command or press the HELP key (Alt-h) while the command or field is highlighted.
Display a list of responses for a command field	Press any direction key to display the list, then use the direction keys to highlight your choice.
Disconnect (using Custom Menu)	Choose the Logoff command.
Disconnect (no Custom Menu)	Log off from the host and choose the Disconnect command.
Quit Access	Choose the Quit command.

3 Conducting Communications Sessions

You can use Microsoft Access for many purposes. For example, you might want to use an information service to compile investment statistics on a specific industry, or you might want to connect to your office computer to access files while you are working at home. Typically, as information appears on your screen, you will want to pause, review, capture information, create files, or print. As you create more and more files, you will need to know how to manage them. This chapter explains how to do these common tasks.

Pausing and Resuming

During your communications session, you can pause at any time. For instance, you may want to stop the information scrolling across the screen so you can study it. When you pause, information continues to arrive, but it remains in the communications buffer, rather than scrolling onto your screen.

Important If you connect to a host that does not support XON/XOFF flow control, do not pause, or you will lose the data that arrives after the communications buffer fills up. For more information on XON/XOFF, see Chapter 9, “Changing Modem and Communications Settings.”

To pause and resume

To pause during a communications session:

- ❑ Press the PAUSE ON/OFF key (F9).

The status line displays *WAIT* to remind you that you are pausing. You are still connected, but Access is not displaying incoming characters on your screen.

- ❑ To resume, press the PAUSE ON/OFF key (F9) again.

Access displays incoming data on your screen once more.

Reviewing Information

When incoming information has scrolled off your screen to make room for new information, it is not lost. Access stores it in a review buffer. You can review it, capture it, or print it at any time before you quit Access.

Thus, you can connect to a host, get your information, disconnect, and then review the information at your convenience. However, if you want to save any of this information, you must capture it to a file before you quit Access. The following section describes how to capture information.

The capacity of the review buffer depends on how much memory your computer has available. For more information, see the Command Area in Chapter 20, “Session Menu and Phonebook Commands.”

Information that has scrolled off your screen into the review buffer

```

/JAPAN GM C TOYOTA/AUT MON/
03/21 JAPANESE AUTOMAKERS FIGHTING
(WJ) OVER LEVEL OF EXPORTS TO U.S.
JAPAN'S AUTO MAKERS ARE FIGHTING
FURIOUSLY AMONG THEMSELVES OVER HOW
MANY CARS TO SHIP TO THE U.S. WHEN THE

```

```

FOUR-YEAR-OLD VOLUNTARY IMPORT
RESTRAINTS EXPIRE IN 10 DAYS.
ALSO STILL AT ISSUE IS PRECISELY
WHAT ROLE THE JAPANESE GOVERNMENT WILL
PLAY BEYOND MONITORING THE EXPORT
STATISTICS EVERY THREE MONTHS. INDEED,
JAPANESE AUTO OFFICIALS EMPHASIZED THAT
NOTHING HAS BEEN DECIDED. THEY SAID THE
AUTO MAKERS ARE SO DIVIDED THAT THE
FIGHT COULD DRAG ON BEYOND THE MARCH 31
EXPIRATION DATE FOR THE RESTRAINTS.

```

```

THE MAIN STICKING POINT IS HOW BIG
AN INCREASE IN SHIPMENTS TO ALLOW THE
SO-CALLED CAPTIVE EXPORTERS THAT SUPPLY
CARS TO GENERAL MOTORS CORP. AND
CHRYSLER CORP. FOR SALE IN THE U.S.
UNDER GM'S AND CHRYSLER'S OWN BRAND
NAMES. GM AND CHRYSLER HAVE ASKED THEIR
JAPANESE AFFILIATES -- ISUZU MOTORS
LTD. AND SUZUKI MOTOR CO. BY GM, AND
MITSUBISHI MOTORS CORP. BY CHRYSLER --
FOR AN ADDITIONAL 350,000 CARS
ANNUALLY.

```

SESSION

Access: DOWJONES 00:07:32 L1W1

```

THOSE 350,000 CARS ALONE WOULD
REPRESENT A 19% GAIN IN JAPAN'S OVERALL
SHIPMENTS, TO 2.2 MILLION FROM
1,850,000 IN THE 12 MONTHS ENDING MARCH
31. IF THE JAPANESE AUTO MAKERS AND THE

```

Information coming into the communications buffer

To review information that has scrolled off the screen, either during a session or after you disconnect:

- 1 Press any direction key.
The status line displays *REVIEW*.
- 2 Use the direction keys to scroll through your information. See Appendix A, "The Keyboard," for a complete list of direction and scrolling keys.
- 3 When you finish reviewing, press the PAUSE ON/OFF key (F9) or the MENU key (F10) to resume your session.

To review information

Displaying a list of function keys

If you are connected to a host, reviewing does not disconnect you; you are still connected, but you are not communicating with the host.

Access has several function keys, including the PAUSE ON/OFF key (F9) and the MENU key (F10). You can display a list of function keys on the screen while you are working. Press the following keys to display different sets of function keys:

- The LABEL key (F2)
- The SHIFT-LABEL key (SHIFT-F2)
- The Alt-LABEL key (Alt-F2)

For a complete list of function keys, see Appendix A, “The Keyboard.”

Capturing and Printing Information

If you want to save information, you can capture it to a file or print it at any time during or after your communications session.

- You can capture information to a file.
- You can send incoming information directly to your printer.
- You can capture or print information that is stored in the review buffer.

You can also send files to other computers. For more information, see Chapter 10, “Transferring Files.”

Capturing to a File

To capture information to a file, first open the file. Next, select the information you want and start capturing it. When you have captured the information you want, stop capturing and close the file.

Using Transfer Capture with no Custom Menu

To create a file and then capture information to it when you are connected to a host for which Access has no Custom Menu, you use the Transfer Capture command from the Session menu:

- 1 Press the MENU key (F10) to display the Session menu.
- 2 Choose the Transfer Capture command (press T, then C).
- 3 In the “to filename” field, enter a unique filename, including an extension (for example, in the filename TEST.DOC, .DOC is the filename extension). You can overwrite an existing file or

append to it; enter the existing filename to do so. If you don't specify a filename, Access automatically uses TEMP.

In the "action" field, the proposed response, "Open," is the correct choice.

- 4 Press the ENTER key.

If you entered an existing filename, Access asks if you want to overwrite the file, or append the new information to it. Press O to overwrite, or A to append. You can also cancel the command and start over by pressing the Esc key.

Once you carry out the command, Access starts capturing information to the specified file. You will see *Cpt* on the status line.

- 5 Choose the Connect command to resume communications.
- 6 To capture only certain information, press the CAPTURE ON/OFF key (F3) to stop and start capturing.
- 7 When you finish capturing, press the MENU key (F10) to return to the Session menu.
- 8 Choose the Transfer Capture command again.
The proposed response of "Close" is correct.
- 9 Press the ENTER key.

When you are using a Custom Menu, you use the Capture command from the Custom Menu to create a file and capture information to it. Choose the Capture command, then follow the same steps given above.

To see how many characters have been captured:

- Press the STATUS key (F5) twice. The number of captured characters appears after the filename.

During a session, you may see information coming in that you want to capture immediately. You don't need to have previously opened a file to capture information. You can always capture information to Access' temporary file, TEMP, by using the CAPTURE ON/OFF key (F3) to start and stop capturing. The information you capture is appended to the TEMP file. While you don't have to open TEMP to capture information, you should close TEMP using the Transfer Capture command when you are finished capturing. There are some actions, such as transferring a file, that Access cannot carry out while a file is open.

You can save the information in the TEMP file under a more descriptive filename using the Transfer Rename command. See "Managing Files" later in this chapter.

Using Capture from a Custom Menu

Printing

Printing

You can send incoming information directly to the printer. If your printer is connected to your computer at a port other than LPT1, or if you want to change other printer setup information, you will need to change the settings before you print. For details, see below.

Some printers may run at a slower speed than your communications line, possibly resulting in lost data. Some hosts support XON/XOFF flow control to regulate data transmission. If the host supports it, Access can use XON/XOFF to signal the host when to transmit and when to refrain, thus preventing data loss. For more information on using XON/XOFF flow control, see Chapter 9, “Changing Modem and Communications Settings.”

To send incoming information directly to your printer as you receive it:

- 1 Press the PRINT ON/OFF key (F4).
Access sends the information to the printer, and displays *Prn* in the status line.
- 2 When you finish printing, press the PRINT ON/OFF key again.

Entering printer setup

If your printer is connected to a port other than LPT1, or if you want to add or change printer setup information, use the Options command.

- 1 Choose the Options command from the Session menu.
- 2 In the “printer setup” field, enter your printer device designation followed by a colon (for example, *LPT2:*).

Access supports the following printer device designations: LPT1, LPT2, LPT3, COM1, and COM2. If you are using a serial printer, enter COM1 or COM2, depending on your printer connection.

- 3 Following the colon, enter any special print mode characters (to specify bold or condensed type, for example).

To find out what print modes your printer supports, and what special characters to use, see your printer manual. To send a control character, type a caret (^) followed by the uppercase character. For example, ^L. To send an escape character, type ^/.

- 4 Press the ENTER key.

Note You can capture and print at the same time.

Capturing and Printing During Review

Capturing and printing during review

You may decide to review the information that has scrolled off the screen, then either capture some of it to a file or print it. You can do this any time before you quit Access, either during or after a communications session.

To capture information to a file during review:

- 1 Use the Transfer Capture command from the Session menu to open a file.
- 2 Press any direction key to start reviewing.
- 3 Move the highlight to the first character of the text you want to capture by using the selection keys (UP, DOWN, RIGHT, and LEFT).
- 4 Press the EXTEND key (F6) to mark the beginning of your selection.

The status line displays *EX*.

- 5 Press any selection key until you have highlighted the information you want to capture.

For a list of selection keys and other review keys, see Appendix A, "The Keyboard."

```

N IBM      01/11 EJ 1/5
/AAPL IBM  CBU /EDP /
03/15 APPLE STAKES FUTURE ON BATTLE
(WJ) WITH IBM FOR OFFICE MARKET
APPLE COMPUTER INC. STANDS ON THE
VERGE OF SEEING WHETHER ITS RISKY PLAN
TO WIN A BIG PART OF THE BUSINESS
MARKET FOR COMPUTERS WILL WORK.
THIS WEEK APPLE BEGAN SHIPPING A
LONG-AWAITED PRODUCT THAT LINKS ITS
MACHINES AND LETS THEM COMMUNICATE WITH
ONE ANOTHER. NEXT WEEK ITS
SOPHISTICATED LASER PRINTER, ANOTHER
CRUCIAL OFFICE ACCESSORY, SHOULD BE
AVAILABLE IN STORES. AND NEXT MONTH,
LOTUS DEVELOPMENT CORP. OF CAMBRIDGE,
MASS., IS EXPECTED TO DELIVER A
BUSINESS SOFTWARE PACKAGE THAT COULD AT
LAST ANOINT THE MACINTOSH AS A SERIOUS
BUSINESS MACHINE.
BUT APPLE IS GETTING TO TEST ITS
OFFICE STRATEGY -- A RADICAL CHANGE FOR
A COMPANY THAT GREW BIG SELLING
COMPUTERS TO INDIVIDUALS AND SCHOOLS --
REVIEW
WAIT EX Access: DOWJONES 00:05:55 L1W1

```


- ❑ Press CAPTURE ON/OFF (F3) to capture the highlighted information to the file; press PRINT ON/OFF (F4) to print the information. You can print and capture at the same time.
- ❑ Press the PAUSE ON/OFF key (F9) or the MENU key (F10) to resume your communications session.
- ❑ Choose the Transfer Capture command once more to close the file.

Remember, when you use the Quit command to leave Access, Access discards any information that is not captured to a file.

Managing Files

Naming a file

Filenames have two parts: a name of one to eight characters and an extension made up of a period (.) followed by up to three characters (for example, in the filename NEWFILE.DOC, .DOC is the extension). Filenames begin with a letter followed by any combination of letters (A to Z), numbers (0 to 9), and the following characters:

\$ & % () - @ ^ { } # _ ' ' !

Access does not distinguish between uppercase and lowercase letters, so you can use any combination of cases. Note, therefore, that you cannot use uppercase and lowercase to distinguish filenames; MYFILE is the same filename as myfile.

Viewing a Directory or a File

Viewing your directory

Access stores your files in a directory on a disk. You can display information on a particular file (such as its size), see the directory of files, or look at the contents of a particular file by using the Transfer View command from the Session menu.

- ❑ Choose the Transfer View command.

The following display appears:

```
TRANSFER VIEW: Directory File
```

- ❑ Choose Directory.
- ❑ Instead of typing a name in the “filename” field, press the ENTER key.

Access displays the directory of files, showing the size of each in bytes, as well as the time and date each was last saved. If the directory fills more than one screen, you can see the next screen by pressing N.

- 4 To return to the Session menu, press the Esc key.

You can see the same information for a single file. To see file information:

- 1 Choose the Transfer View command.
- 2 Choose Directory.
- 3 In the “filename” field, type the name of a file. Or, press any direction key to display a list of files, then use the direction keys to highlight the file you want.
- 4 Press the ENTER key.

Access displays information about the file you chose.

- 5 To return to the Session menu, press the Esc key.

Viewing file information

Viewing the Contents of a File

You also use the Transfer View command to see the contents of a particular file.

- 1 Choose the Transfer View command.
- 2 Choose File.
- 3 In the “filename” field, type the name of a file. Or, press any direction key to display a list of files, then use the direction keys to highlight the file you want.
- 4 Press the ENTER key.

Access displays the file you chose on the screen. If the file is too long to be viewed on one screen, you can view the next screen by pressing N.

- 5 To return to the Session menu, press the Esc key.

Viewing the contents of a file

Deleting Files

If you want to delete a file, remember that the deletion is permanent. You cannot restore a file once you have deleted it with the Transfer Delete command. To delete a file:

- 1 Choose the Transfer Delete command from the Session menu.
- 2 In the “filename” field, type the name of a file. Or, press any direction key to display a list of files, then use the direction keys to highlight the file you want.

Deleting files

- 3 Press the ENTER key.
Access will ask you to confirm that you want to delete the file.
- 4 Press Y to confirm.

Renaming files

Renaming Files

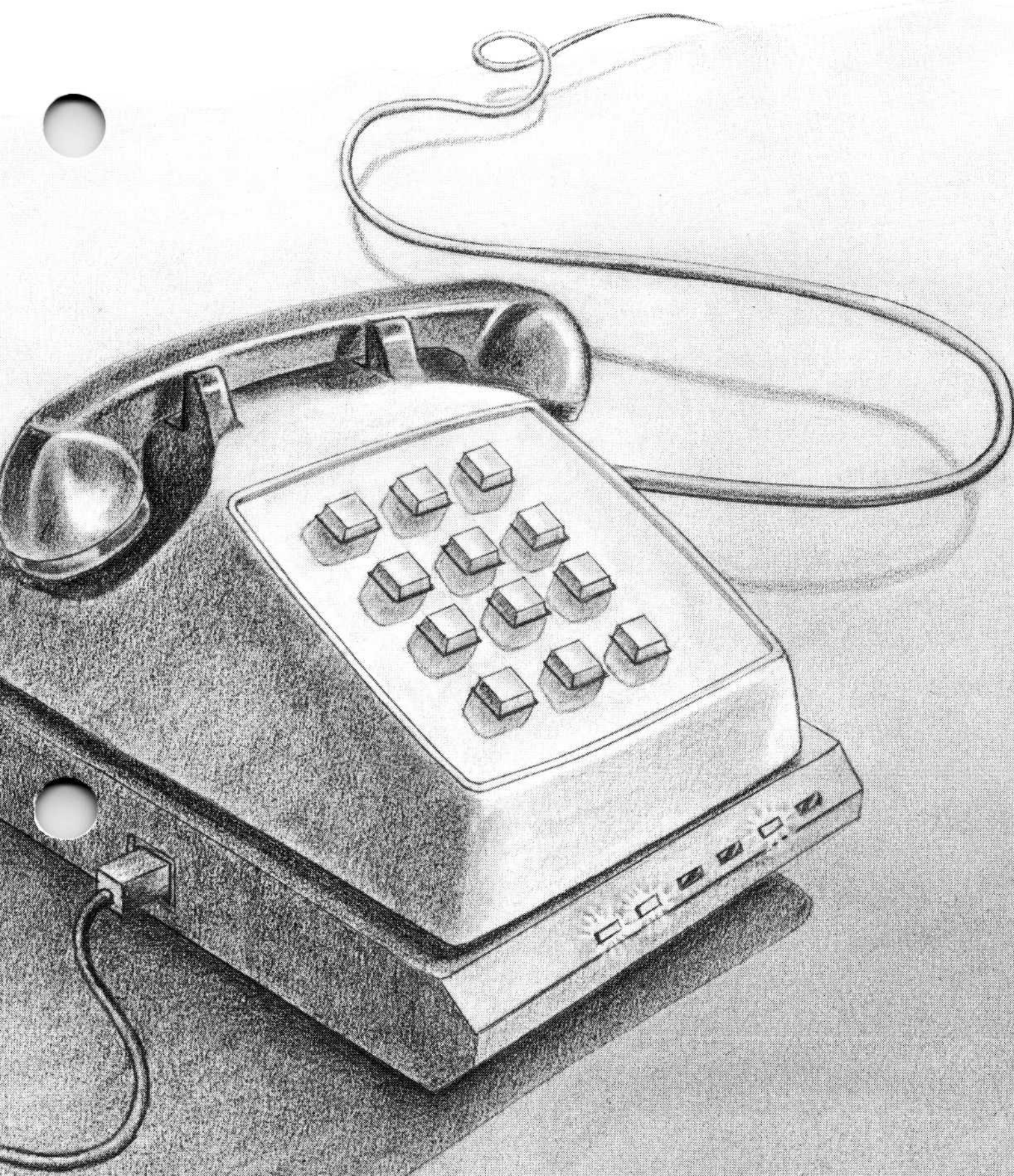
There may be times when you need to rename a file. To rename a file:

- 1 Choose the Transfer Rename command from the Session menu.
- 2 In the “old filename” field, type the name of a file. Or, press any direction key to display a list of files, then use the direction keys to highlight the file you want.
- 3 In the “new filename” field, type the new name you want the file to have.
- 4 Press the ENTER key.

Summary: Communications Sessions

If you want to...	Use this:
Pause and resume during a communications session	The PAUSE ON/OFF key (F9)
See a list of function keys	The LABEL key (F2), SHIFT-LABEL key (SHIFT-F2), or Alt-LABEL key (Alt-F2)
Review information that has scrolled off the screen	Any direction key (PgUp, PgDn, UP, DOWN, RIGHT, LEFT)
Capture information to a file (Custom Menu)	The Capture command
Capture information to a file (Session menu)	The Transfer Capture command
Capture selectively	The CAPTURE ON/OFF key (F3)
Capture to the TEMP file	The CAPTURE ON/OFF key (F3)
Return to the Session menu during a communications session	The MENU key (F10)
Print directly	The PRINT ON/OFF key (F4)
View a directory or a file	The Transfer View command
Delete a file	The Transfer Delete command
Rename a file	The Transfer Rename command

Using Custom Menus

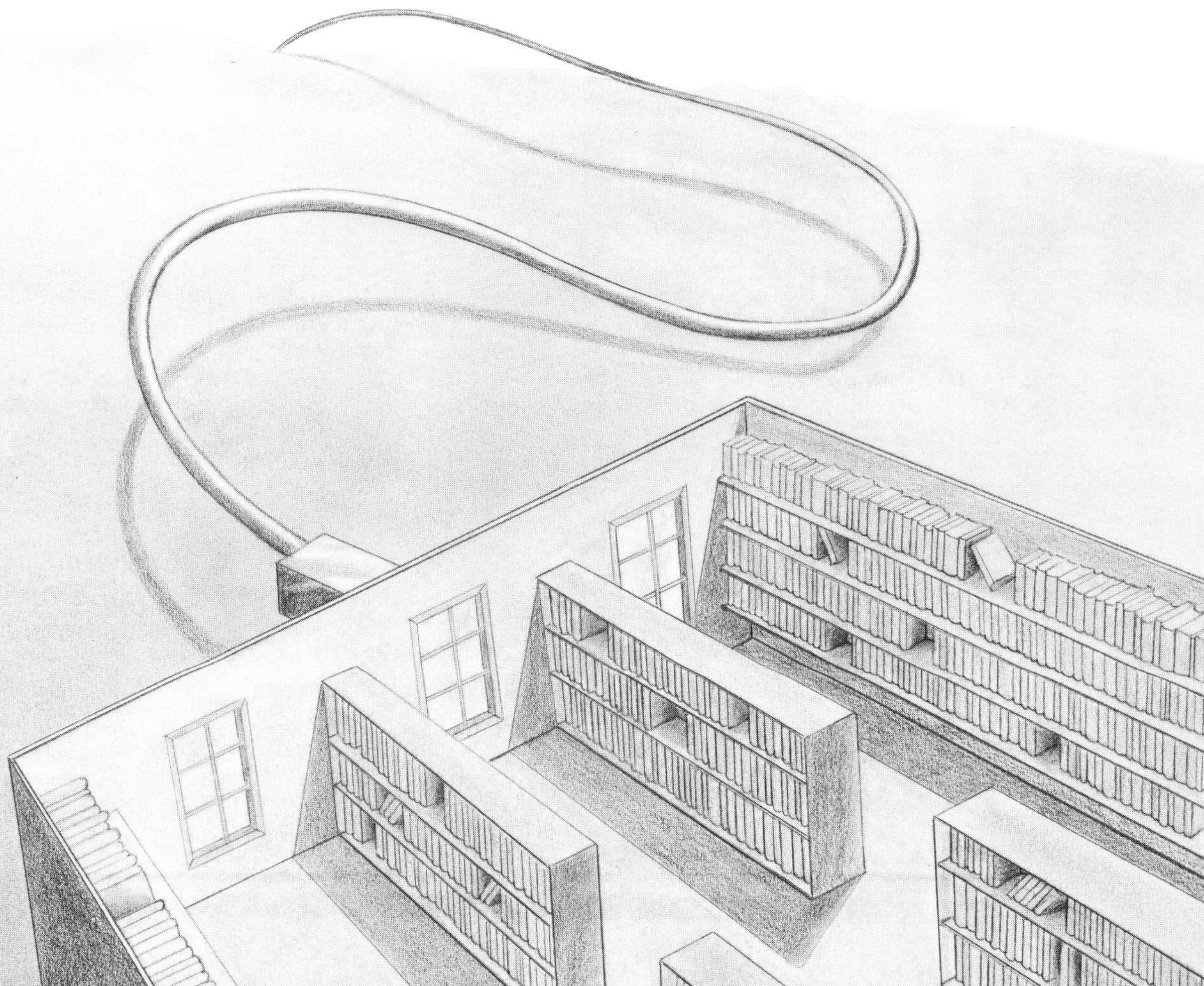


Using Custom Menus

Each chapter in “Using Custom Menus” provides detailed information about Microsoft Access Custom Menus for these services:

- CompuServe Executive Information Service
- Dow Jones News/Retrieval
- NewsNet
- Official Airline Guide
- Access Mail program, which provides Custom Menus for Easylink and MCI electronic mail





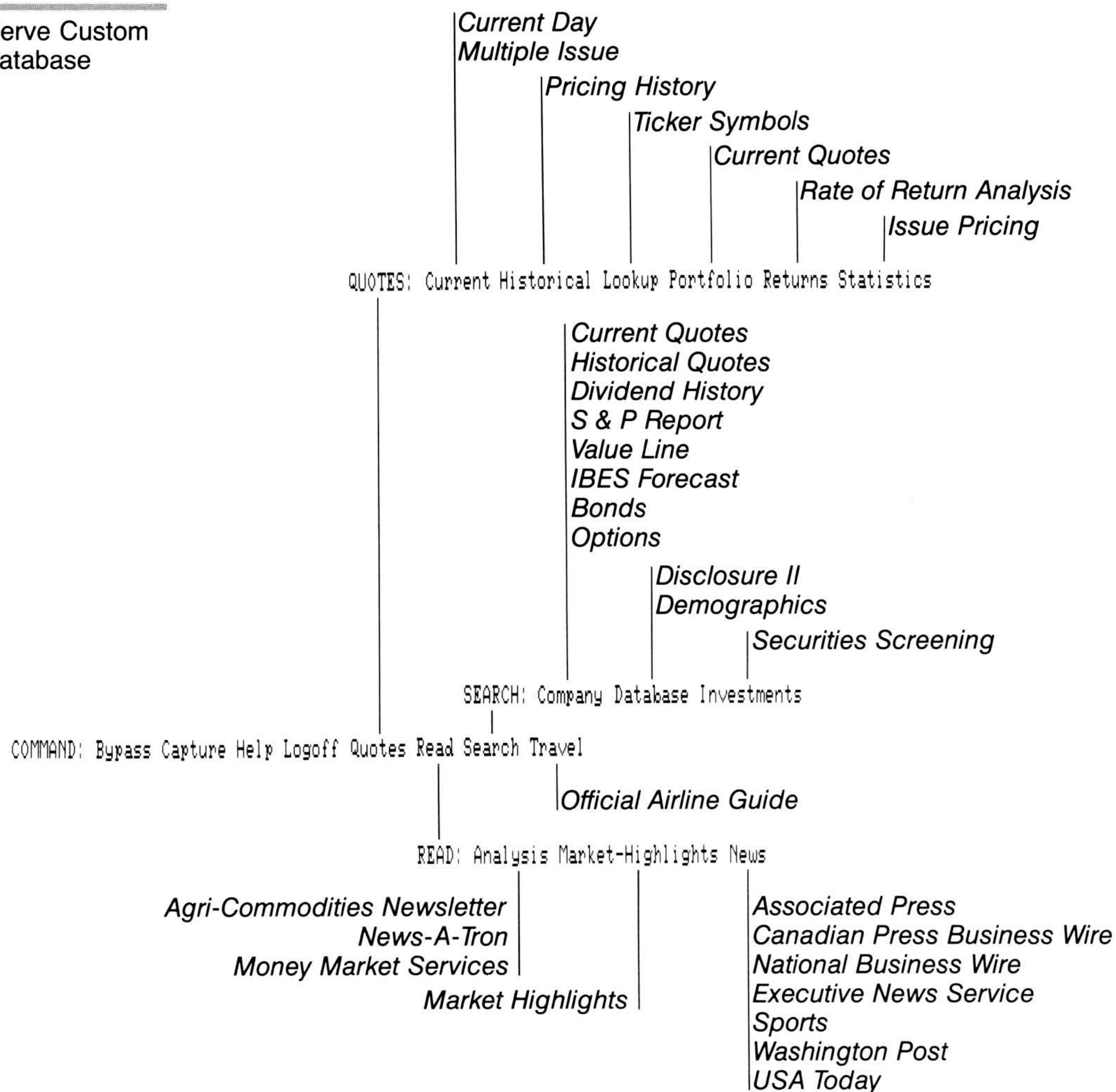
4 CompuServe Executive Information Service

CompuServe® Executive Information Service provides comprehensive business and economic information, including securities statistics; economic reports; corporate, national, and international news; and the Official Airline Guide.

Microsoft Access has added a unique feature to the CompuServe menu — the Portfolio command, which you use to create a portfolio of securities quotes. You also use this command to update your portfolio so you can monitor gains and losses. For details, see “Setting Up a Stock Portfolio” in this chapter.

When you choose a Custom Menu command, such as Quotes or Search, Access translates it into a CompuServe command and brings the requested information to the screen. The chart below illustrates the Custom Menu and database structure for CompuServe.

4.1 CompuServe Custom Menu and Database Structure



This chapter guides you through a sample session with CompuServe, then provides a summary of CompuServe Custom Menu commands.

In order to complete the sample session, you must first subscribe to CompuServe and connect to it according to the procedure outlined in Chapter 1, "Using Access the First Time."

CompuServe provides some free connect time for learning Access. Look for the local telephone number and password in the CompuServe booklet that came with Access.

Using CompuServe

This section introduces you to CompuServe and guides you through some sample tasks.

In this session you will learn how to:

- Set up a stock portfolio
- Look up ticker symbols
- Read news stories
- Search for company data
- End a session

Before You Start

If you have not yet read the three chapters of “Getting Started,” do so now. You need to know how to:

- Choose and cancel commands
- Enter information in command fields
- Use the function keys
- Use the direction keys

In addition, you may want to practice saving and printing the information you retrieve, or you may want to pause to read the information scrolling across your screen. These actions are described in Chapter 3, “Conducting Communications Sessions.”

When you are using the CompuServe Custom Menu and you want to interrupt what you are doing, press the Esc key twice. This stops the information scrolling onto your screen and cancels your request. The message “Enter Y to abort procedure, N to continue” appears. Press Y to stop the procedure and return to the main menu.

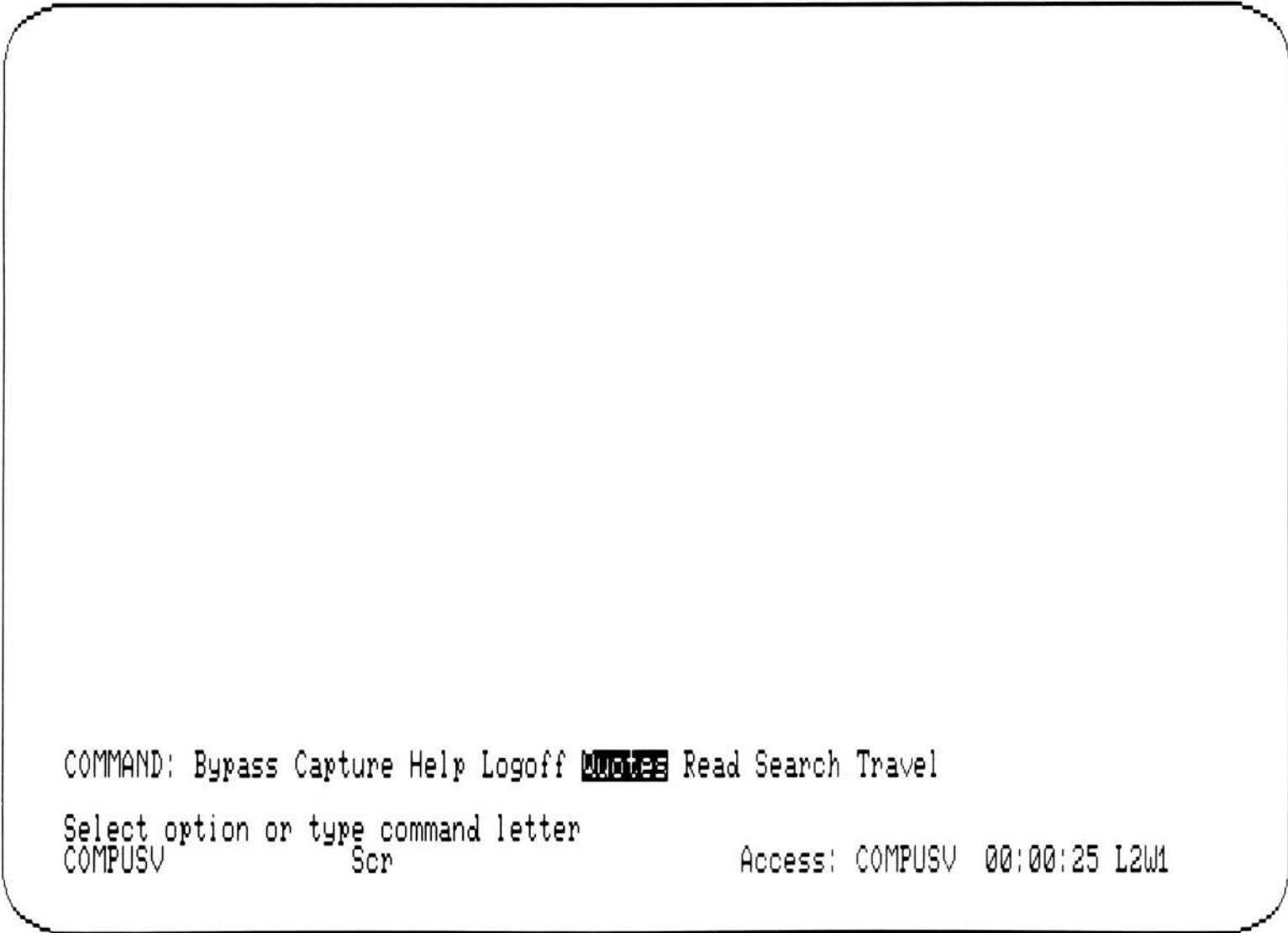
**If you want to
interrupt scrolling**

If you “time out”

Most services you connect to will automatically log you off (or “time out”) if they don’t receive input from you for a period of time — usually from two to five minutes, depending on the service. If you time out, CompuServe will display a message saying that you have been dropped by the system. Use the Logoff command from the Custom Menu to return to the Session menu, then use the Connect command from the Session menu to connect to CompuServe again.

The Custom Menu for CompuServe

When you have connected to CompuServe, Access logs you in and displays the main Custom Menu at the bottom of your screen.



```
COMMAND: Bypass Capture Help Logoff Quotes Read Search Travel
Select option or type command letter
COMPUSV                               Scr                               Access: COMPUSV 00:00:25 L2W1
```

The following examples begin at the CompuServe main Custom Menu.

Setting up a stock portfolio

Setting Up a Stock Portfolio

With the Portfolio command, you can set up a portfolio of securities by typing in the ticker symbols for the securities which interest you. Access remembers these symbols and uses them to search for current prices each time you choose this command.

To set up a portfolio:

- 1 Choose the Quotes command.

2 Choose the Portfolio command.

The Portfolio command fields prompt you for the ticker symbols.

```
QUOTES PORTFOLIO
symbol 1: 2: 3: 4: 5:
        6: 7: 8: 9: 10:
       11: 12: 13: 14: 15:
      date: 3/16/85
```

3 Type *pcar* in the “symbol 1” field.

4 Type *rban* in the “2” field.

5 Type *ibm* in the “3” field.

6 Type in a date or accept the proposed response.

7 Press the ENTER key.

The stock quotes for Paccar, Inc.; Rainier Bancorporation; and IBM scroll onto your screen.

for instructions, or HELP
for a list of options.

Issue: pcar,rban,ibm,,

Paccar Inc			PCAR
Vol(00)	Hi/Ask	Low/Bid	Last
1121	48.250	47.000	47.000
Updated:	3/15	Change:	-1.000

Rainier Bancorporation			RBAN
Vol(00)	Hi/Ask	Low/Bid	Last
209	24.125	23.625	24.125
Updated:	3/15	Change:	+0.500

International Business Ma			IBM
Vol(00)	Hi/Ask	Low/Bid	Last
11974	130.000	128.000	128.625
Updated:	3/15	Change:	-0.250

Updating portfolio...
COMPUSV Scr

Access: COMPUSV 00:06:33 L1W1

When you want to see your updated portfolio, choose the Quotes Portfolio command again. The command fields will show the ticker symbols you typed in previously. Press the ENTER key and the current quotes will appear. To change your portfolio, type in different ticker symbols.

To find a ticker symbol on line

Looking Up Ticker Symbols

In the previous examples, you supplied ticker symbols in the “symbol” command fields. You must type a ticker symbol each time you need a security quote. Rather than memorize each one, you can look them up on line or in the CompuServe user’s guide.

To look up the ticker symbols on line:

- 1 Choose the Quotes command.
- 2 Choose the Lookup command.
- 3 Choose Stock from the “type” field.
- 4 In the “company name” field, you can type the name of a company, or the first few letters or first part of a company name. Type *gulf*
- 5 In the “search on” field, accept the proposed response, which is “name.”
- 6 Press the ENTER key.

CompuServe searches for all company names containing the word *gulf* and displays a list of names and ticker symbols.

Access transfers you to the CompuServe command mode when there is more than one screenful of information. At the end of the list, the CompuServe message, “More for additional \$.25 charge (Y or N)?” appears.

- Press Y and follow CompuServe’s online instructions to see the rest of the list of companies, or press N to return to the Custom Menu.

Reading news stories

Reading News Stories

With the Read command, you can read a variety of news stories from the *Washington Post* or the Associated Press (AP), as well as economic analyses, sports, and press releases.

To read news stories from the Associated Press, for example:

- 1 Choose the Read command.
- 2 Choose the News command.
- 3 Choose AP from the Read News menu.

After you choose AP, Access puts you into the CompuServe Associated Press news database. A list of news categories appears on your screen.

- 4 Follow the CompuServe instructions on your screen to read the AP news of your choice.
- 5 When you're through reading, press the MENU key (F10) to return to the main menu.

Searching for Company Data

With the Search command, you can search many databases for a wide range of information.

To search various economic databases for information on a particular company:

- 1 Choose the Search command.
- 2 Choose the Company command.
- 3 In the "company symbol" field, type *ibm*
The company symbol is the same as the stock ticker symbol unless the company has more than one class of stock.
- 4 Choose "Yes" in the "current quote," "issue description," and "dividends" command fields.
- 5 Type start and end dates for the search.
- 6 Choose "Yes" in the "S & P Green Sheets" field.
- 7 Press the ENTER key.

IBM's current stock quote, issue description, current dividends, and S & P Green Sheet synopsis scroll to your screen.

Ending the CompuServe Session

To end the CompuServe session:

- Choose the Logoff command from the CompuServe main Custom Menu.

Access disconnects you from CompuServe and displays the Session menu.

Searching for company data

Ending the session

CompuServe Commands

This section describes the CompuServe Custom Menu commands in alphabetical order. Each command description includes what you see after choosing the command, the purpose of the command, and other information you may need.

COMMAND: Bypass Capture Help Logoff ~~Quotes~~ Read Search Travel

Bypass

Bypass

Takes you directly into the CompuServe command mode, bypassing the Custom Menu.

Choose Bypass to view parts of the CompuServe database not included in the CompuServe Custom Menu.

Follow the instructions online or in the CompuServe user's guide. Press the MENU key (F10) to return to Access and the CompuServe Custom Menu.

Capture

Capture

CAPTURE filename: █ action:(Open)Close

Opens or closes a file for saving information.

Type a filename in the "filename" field, using the file-naming conventions required by your operating system, or press any direction key to view a list of current filenames.

Choose "Open" in the "action" field when you want to start a new file or open a closed one. When a file is open you can use the CAPTURE ON/OFF key (F3) to toggle it closed and then open again to save information selectively.

Choose “Close” when you have finished capturing information to the file.

Help

HELP: **Resume** Next Previous
Commands Databases

Provides information about CompuServe Custom Menu commands and tells you what command sequence to use to reach each of the databases.

Logoff

Logs you off and disconnects you from CompuServe. If you press Y at the prompt to confirm logoff, the Session menu reappears.

Quotes

QUOTES: **Current** Historical Lookup Portfolio Returns Statistics

Shows you stock, bond, U.S. Treasury issue, option, and mutual fund quotes. Sets up a sample portfolio of securities. Provides pricing statistics for any security and rate of return calculations for stocks. Provides a way to look up ticker symbols on line.

Quotes Current

QUOTES CURRENT symbol 1: ■ 2: 3:
4: 5:

Shows you current securities quotes.
In the “symbol” fields, enter ticker symbols for the securities you want to see.

Help

Logoff

Quotes

Quotes Current

Quotes Historical

Quotes Historical

```
QUOTES HISTORICAL symbol: 
                    period:(Daily)Weekly Monthly
                    start date: 3/15/85 end date: 3/15/85
```

Shows prices for securities between given dates, and at specified intervals (daily, weekly, or monthly).

In the “symbol” field, enter a ticker symbol for the security whose pricing history you want to see. Choose daily, weekly, or monthly quotes, and then enter start and end dates.

Quotes Lookup

Quotes Lookup

```
QUOTES LOOKUP type: Bond Fund Option Stock
               company name:
               search on:(name)ticker
```

Provides a way to look up ticker symbols on line.

Choose “Bond,” “Fund,” “Option,” or “Stock.” Enter the company name in the “company name” field. Then specify “Name” or “Ticker,” depending on whether you want CompuServe to search using the ticker symbol or the company name. After you press the ENTER key, the information scrolls onto your screen.

If there is more than one screenful of information, Access puts you temporarily into the CompuServe command mode. The CompuServe message, “More for additional \$.25 charge (Y or N)?” appears. To continue your search, press Y and follow online instructions. To return to the Custom Menu, press N then ENTER and then press the MENU key (F10).

Quotes Portfolio

Quotes Portfolio

```
QUOTES PORTFOLIO
symbol 1:  2: 3: 4: 5:
        6: 7: 8: 9: 10:
       11: 12: 13: 14: 15:
        date: 3/17/85
```


Sets up a portfolio of securities, which Access stores in a file called COMPORT.DAT and updates each time you choose the command.

Type in up to fifteen ticker symbols in the numbered fields. After you press the ENTER key, Access displays current quotes for these securities.

To see updated quotes for the securities in your portfolio, choose the Quotes Portfolio command again and press the ENTER key.

To change your portfolio, choose the command and type in different ticker symbols, then press the ENTER key.

Note When you change the ticker symbols, Access changes the portfolio file. You can maintain only one portfolio at a time.

Quotes Returns

Quotes Returns

```
QUOTES RETURNS start date: 3/15/85 end date: 3/15/85
symbol 1:          2:          3:
         4:          5:          6:
include dividends?(yes)no
sort output:(alphabetical)gains losses
```

Calculates the rate of return for a stock.

Type the start and end dates for the period for which you want a rate of return.

Type the ticker symbols for the stocks you want to see.

Choose “yes” or “no” in the “include dividends” field.

In the “sort output” field, choose the criterion by which to sort the stocks: alphabetically, or by gains or losses.

Quotes Statistics

Quotes Statistics

```
QUOTES STATISTICS symbol: 
start date: 3/15/85 end date: 3/15/85
```

Provides pricing statistics over a given period during the past year.

Type a ticker symbol, then type the start and end dates for the period for which you want the statistics.

Read

Read

READ: Analysis Market-Highlights **NEWS**

Provides financial analyses, news, and market highlights.

Read Analysis

Read Analysis

READ ANALYSIS: Futures **Monetary** News-A-Tron

Displays economic research from Money Market Services and financial market analyses from News-A-Tron. Also provides information about futures commodities.

Futures Agri-Commodities Newsletter.

Monetary Money Market Services database. Asks you whether you want to read daily or weekly reports, or briefings from current or previous issues. Briefings are irregularly updated reports from monetary databases.

News-A-Tron Today's securities market news. Choose "Index-Analysis" for Dow Jones commentary, or "Markets" for commodities and other market information.

Note Each selection puts you directly into the CompuServe command mode. Follow the instructions on your screen for looking up market information. Press the MENU key (F10) to return to the Custom Menu.

Read Market-Highlights

Read Market-Highlights

Provides reports for the day on Wall Street, including the most active stocks, volume leaders, and other information.

Note When you choose this command, Access puts you directly into the CompuServe command mode. Follow the instructions on your screen. Press the MENU key (F10) to return to the Custom Menu.

Read News

READ NEWS: **MF** Canada Executive PR Sports USAToday WashingtonPost

Offers headlines and stories from all the news services in the CompuServe database.

AP Associated Press news.

Canada Canadian news.

Executive Executive news clipping service and key word search of the major publications.

PR Company press releases.

Sports Sports stories.

USAToday *USA Today* news. Choose "News" for highlights of today's events; choose "Trends" for commentary on news trends.

WashingtonPost *Washington Post*.

Note Each selection puts you directly into the CompuServe command mode. Follow the instructions on your screen to read the news. Press the MENU key (F10) to return to the Custom Menu.

Read News

Search

SEARCH: **CompuServe** Database Investments

Searches the CompuServe databases for information. You can initiate a search using a company name, a specific database, or certain investment criteria.

Search

Search Company

```
SEARCH COMPANY company symbol: ■
      current quote: Yes(No)      issue description: Yes(No)
      price history: Day Week Month(No)      dividends: Yes(No)
      start date: 3/15/85      end date: 3/15/85
      S&P Green Sheets: Yes(No)
      Value Line annual: Yes(No)      Value Line quarterly: Yes(No)
      Value Line projections: Yes(No)      IBES Forecast: Yes(No)
      list bonds: Yes(No)      list options: Yes(No)
```

Search Company

Searches the databases named in the command fields for information about a company.

In the “company symbol” field, type the ticker symbol of the company for which you want information.

Choose “Yes” in the database fields for the information you want. If you want a stock price history, choose the interval (Day, Week, or Month) and type start and end dates.

Search Database

Search Database

SEARCH DATABASE: **SEC-Disclosure** Demographics

Performs a limited search only in the database you specify.

When you choose a database, Access puts you directly into the CompuServe command mode. Follow the instructions on your screen to retrieve information directly. Press the MENU key (F10) to return to Access and the CompuServe Custom Menu.

SEC-Disclosure Searches the Disclosure II™ reports for information on a company. Enter the company’s ticker symbol.

Demographics Gives you demographic statistics for marketing analysis and site selection.

Search Investments

Search Investments

Screens securities for performance characteristics.

Access puts you directly into the CompuServe command mode. Follow the instructions on your screen to retrieve information directly. Press the MENU key (F10) to return to Access and the CompuServe Custom Menu.

Travel

Travel

Transfers you to the Custom Menu for the Official Airline Guide (OAG). You can connect to OAG through CompuServe by choosing this command; then you use the OAG Custom Menu exactly as if you had connected to it directly. See Chapter 7, “Official Airline Guide.”

5 Dow Jones News/Retrieval

Dow Jones News/Retrieval® is one of the most comprehensive economic information services available. It provides news and information on thousands of American companies and over fifty industries. Its databases include The Wall Street Journal®; Historical Dow Jones Averages™; Kyodo News International, Inc., of Japan; Cineman Movie Reviews™; Official Airline Guide; and Disclosure II™. Refer to your Dow Jones user's guide for details.

Microsoft Access has added a unique feature to the Dow Jones menu — the Portfolio command, which you use to create a portfolio of securities quotes. You can also use this command to update your portfolio so you can monitor gains and losses. For details, see “Setting Up a Stock Portfolio” in this chapter.

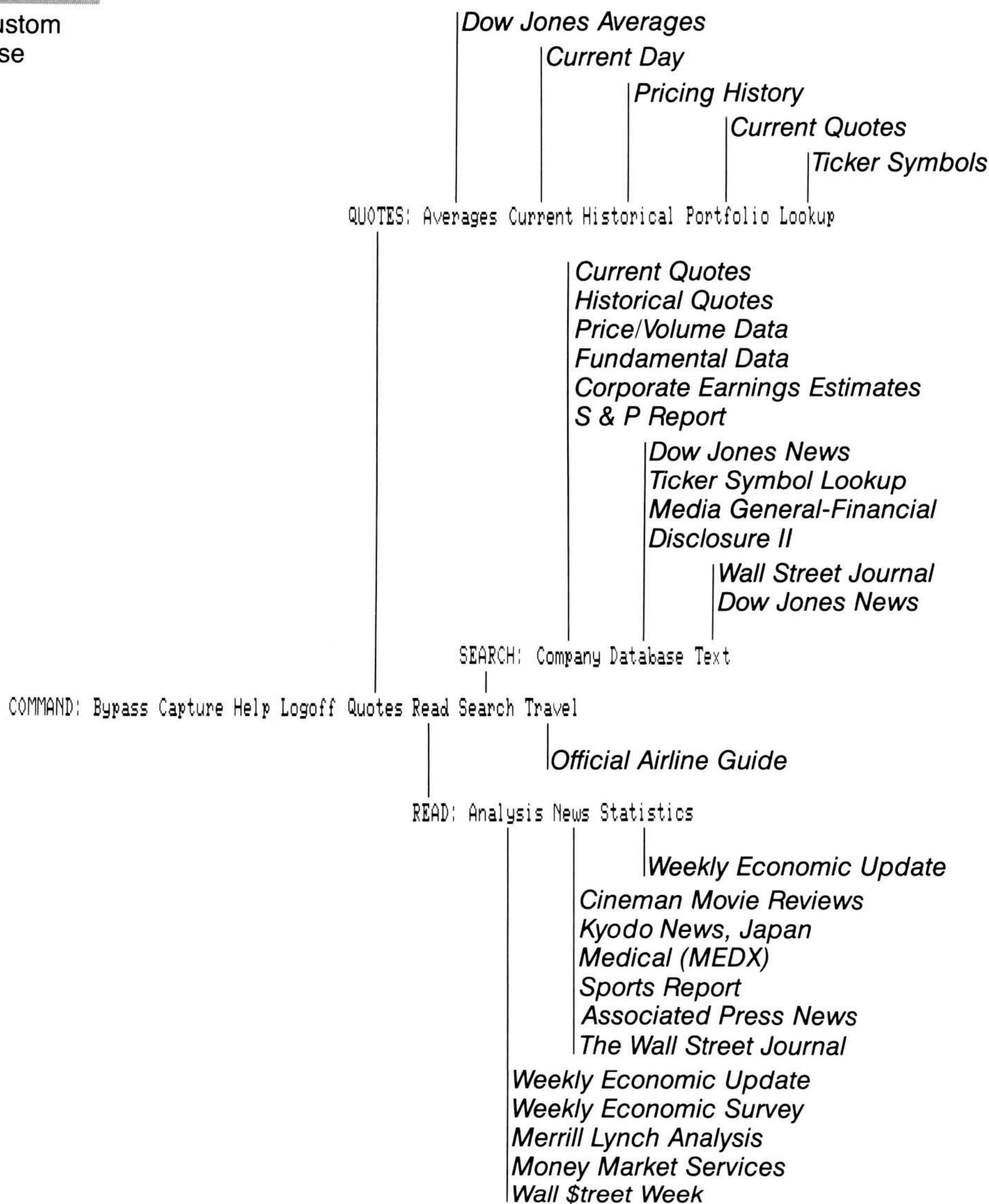
When you choose a Custom Menu command, such as Quotes or Read, Access translates it into a Dow Jones command and brings the requested information to the screen. The chart on the following page illustrates the Custom Menu and database structure for Dow Jones.

This chapter guides you through a sample session with Dow Jones, then provides a summary of Dow Jones Custom Menu commands.

In order to complete the examples in the next section, “Using Dow Jones News/Retrieval,” you must first subscribe to Dow Jones and connect to it according to the procedure outlined in Chapter 1, “Using Access the First Time.”

Dow Jones provides some free connect time for learning Access. For the local telephone number and password, call the customer service representative listed in the Dow Jones News/Retrieval booklet that came with Access.

5.1 Dow Jones Custom Menu and Database Structure



Using Dow Jones News/Retrieval

This section introduces you to Dow Jones News/Retrieval and guides you through some sample tasks. In this session you will learn how to:

- Read stock prices
- Set up a portfolio
- Look up ticker symbols
- Read news stories
- Search for data on a company
- End a session

Before You Start

If you have not yet read the three chapters of “Getting Started,” do so now. You need to know how to:

- Choose and cancel commands
- Enter information in command fields
- Use the function keys
- Use the direction keys

In addition, you may want to practice saving and printing the information you retrieve, or you may want to pause to read the information scrolling across your screen. These actions are described in Chapter 3, “Conducting Communications Sessions.”

When you are using the Dow Jones Custom Menu and you want to interrupt what you are doing, press the Esc key twice. This stops the information scrolling onto your screen and cancels your request. The message “Enter Y to abort procedure, N to continue” appears. Press Y to stop the procedure and return to the main menu.

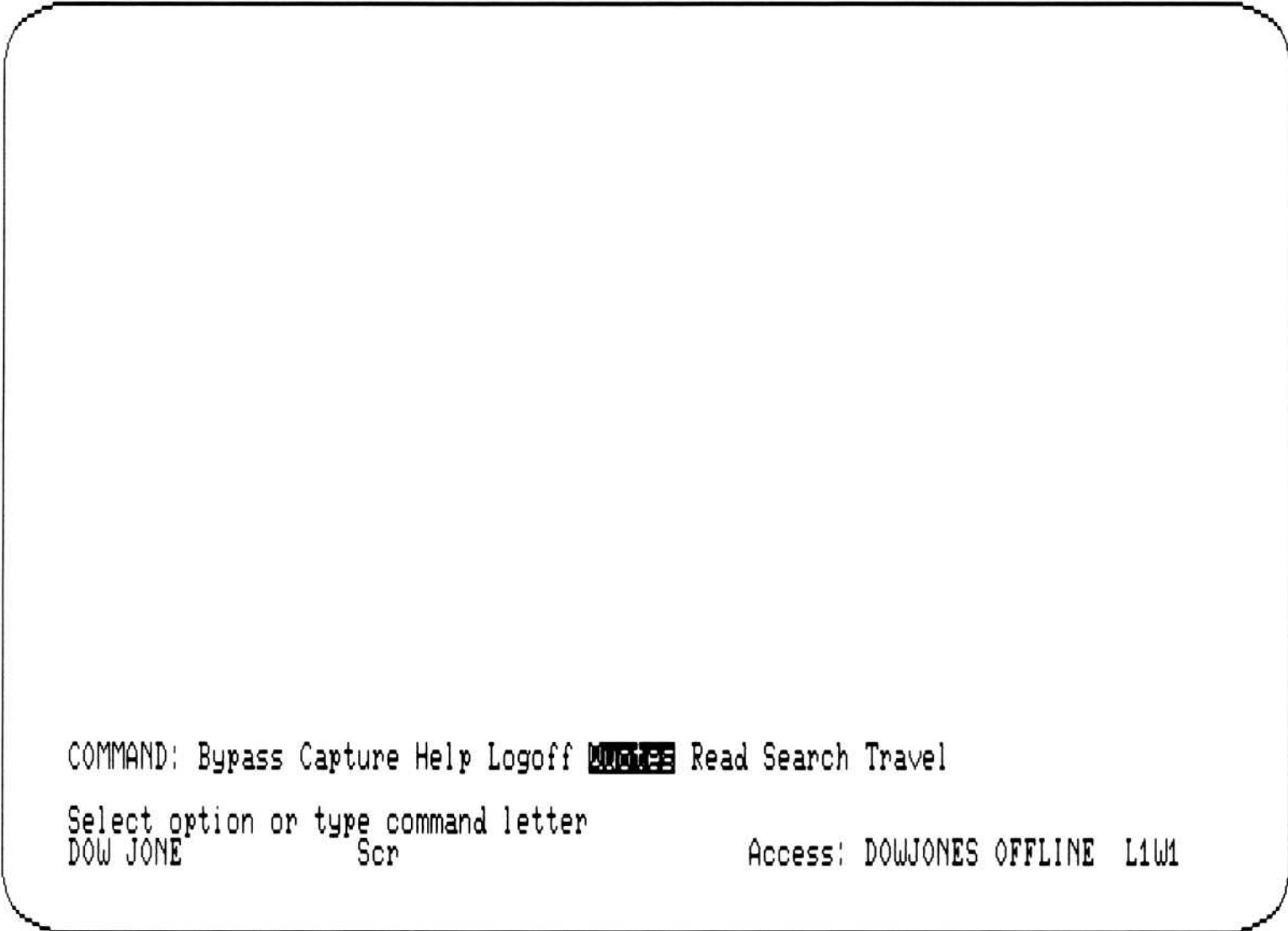
**If you want to
interrupt scrolling**

If you “time out”

Most services you connect to will automatically log you off (or “time out”) if they don’t receive input from you for a period of time — usually from two to five minutes, depending on the service. If you time out, Dow Jones will display a message saying that you have been dropped by the system. Use the Logoff command from the Custom Menu to return to the Session menu, then use the Connect command from the Session menu to connect to Dow Jones again.

The Custom Menu for Dow Jones

When you have connected to Dow Jones, Access automatically logs you in and displays the Dow Jones main Custom Menu at the bottom of your screen.

A screenshot of a terminal window showing the Dow Jones main Custom Menu. The menu is displayed in a monospaced font. At the bottom, it lists several commands: Bypass, Capture, Help, Logoff, Quotes, Read, Search, and Travel. Below this, it prompts the user to 'Select option or type command letter'. The user has entered 'DOW JONE' and the system has responded with 'Scr'. On the right side, it shows the status 'Access: DOWJONES OFFLINE L1W1'.

```
COMMAND: Bypass Capture Help Logoff Quotes Read Search Travel
Select option or type command letter
DOW JONE          Scr
Access: DOWJONES OFFLINE L1W1
```

The following examples begin at the Dow Jones main Custom Menu.

Reading stock prices

Reading Stock Prices

With the Quotes command, you can ask for Dow Jones Averages, set up a sample portfolio of investments, and look up current and historical quotes for stocks, bonds, options, U.S. Treasury issues, and mutual funds listed with the national exchanges.

For example, to look up current stock quotes for General Motors Corporation and Exxon Corporation:

- 1 Choose the Quotes command.
Access displays the Quotes menu.

```
QUOTES: Averages Current Historical Portfolio Lookup
```

- 2 Choose the Current command from the Quotes menu.
The Quotes Current command fields prompt you for information about the particular quote you want to read.

```
QUOTES CURRENT type: Stock Bond Option Mutual-Fund Treasury-Note Warrant
symbol 1: 2: 3:
         4: 5:
```

Dow Jones asks you to enter a *ticker symbol* — a unique symbol for each security listed on the national exchanges — whenever you ask for securities information. For practice, you can use the ticker symbols provided in these examples. If you want to look up a particular company's symbol, see "Looking Up Ticker Symbols" in this chapter.

- 3 Choose "Stock" from the "type" field.
- 4 Type *gm* (the ticker symbol for General Motors Corporation) in the "symbol 1" field. You can use uppercase or lowercase letters.
- 5 Type *xon* (for Exxon) in the "2" field.
- 6 Press the ENTER key.

After a few moments' delay while Dow Jones searches its database, stock prices for General Motors Corporation and Exxon Corporation scroll onto your screen.

Note If Dow Jones cannot locate the information you requested, it gives you a message to that effect, and Access returns you to the main Custom Menu.

When the final page of data is on your screen, the Dow Jones main Custom Menu reappears.

If you want to practice pausing, reviewing, printing, or capturing this information, see Chapter 3, “Conducting Communications Sessions.”

Setting up a stock portfolio

Setting Up a Stock Portfolio

With the Portfolio command, you can set up a portfolio of stocks, bonds, options, mutual funds, or U.S. Treasury issues. You type in the symbols for the securities in which you are interested. Access remembers these symbols and uses them to search for current prices each time you choose this command.

To set up a portfolio:

- 1 Choose the Quotes command.
- 2 Choose the Portfolio command.

The Portfolio command fields prompt you for the ticker symbols.

```

QUOTES PORTFOLIO
  stock 1: 2: 3: 4: 5:
        6: 7: 8: 9: 10:
    bond 1: 2: 3: 4: 5:
    option 1: 2: 3: 4: 5:
    mutual fund 1: 2: 3: 4: 5:
    treasury note 1: 2: 3: 4: 5:
  
```

- 3 Type *pcar* in the “stock 1” field.
- 4 Type *rban* in the “2” field.
- 5 Type *baaaa* in the “bond 1” field.
- 6 Press the ENTER key.

The stock quotes for Paccar, Inc. and Rainier Bancorporation and the bond quotes for Boeing scroll onto your screen.

DOW JONES STOCK QUOTE REPORTER SERVICE
 STOCK QUOTES DELAYED OVER 15 MINUTES
 *=CLOSE PRICE ADJUSTED FOR EX-DIVIDEND

STOCK	BID CLOSE	ASKED OPEN	HIGH	LOW	LAST	VOL(100'S)
PCAR	48	48	48 1/4	47	47	1121
RBAN	23 5/8	23 5/8	24 1/8	23 5/8	24 1/8	209

/baaaa

STOCK	BID CLOSE	ASKED OPEN	HIGH	LOW	LAST	VOL(100'S)
BAAAA	146	145	145	144 3/4	144 3/4	39

COMMAND: Bypass Capture Help Logoff ~~Quotes~~ Read Search Travel

When you want to see your updated portfolio:

- 1 Choose the Quotes Portfolio command again.

The command fields show the ticker symbols you typed in previously.

- 2 Press the ENTER key.

Access displays the current quotes for the securities in your portfolio.

To change your portfolio:

- 1 Choose the Quotes Portfolio command again.

- 2 Type different ticker symbols.

Looking Up Ticker Symbols

In the previous examples you supplied ticker symbols in the “symbol” command fields. You must type in a ticker symbol each time you need a security quote. Rather than memorize each one, you can look them up on line, or in the Dow Jones user’s guide.

To see a complete list of ticker symbols on line:

- 1 Choose the Quotes command.
- 2 Choose Lookup from the Quotes menu.

To look up ticker symbols on line

Note When you choose the Lookup command, a Dow Jones menu appears. The screen format changes because Access has transferred you temporarily into the Dow Jones command mode. In this mode you give commands directly to Dow Jones.

- 3 Follow the Dow Jones instructions on the screen.
- 4 Press the MENU key (F10) to return to Access and the Dow Jones main Custom Menu.

Reading news stories

Reading News Stories

With the Read command, you can read a variety of news stories from *The Wall Street Journal*, the Associated Press, or any of the other Dow Jones news services.

To read *The Wall Street Journal* news, for example:

- 1 Choose the Read command.
- 2 Choose the News command.
- 3 Choose WSJournal from the Read News menu.
- 4 Choose "Today" from the "issue" field to read today's issue.

Access transfers you to the Dow Jones Wall Street Journal database. A list of *The Wall Street Journal* sections appears on your screen.

```
THE WALL STREET JOURNAL
THE EDITION FOR THURSDAY,
MAY 2, 1985
```

```
PRESS FOR
```

```
1 FRONT PAGE
2 EDITORIALS
3 FRONT PAGE -- SECTION 2
4 MARKET NEWS
5 BACK PAGE
```

- 5 Follow the Dow Jones instructions on your screen for selecting headlines and reading today's *The Wall Street Journal* news.
- 6 When you have finished, press the MENU key (F10) to return to the main Custom Menu.

Searching by Company

Searching by company

With the Search command you can search many databases for a wide range of information.

To search for information on a particular company:

- 1 Choose Search.

Access displays the Search menu.

```
SEARCH: Company Database Investments
```

- 2 Choose Company.

You see the Search Company command fields.

- 3 In the "company symbol" field, type *ibm* (the ticker symbol for International Business Machines Corporation).
- 4 Choose "Yes" in each of the following command fields: "current quote," "price/volume data," "fundamental data," and "earnings forecast."

Your screen should look like this:

```
SEARCH COMPANY company symbol: ibm
current quote:(Yes)No
stock price history: Daily(Monthly)Quarterly No
start date: 3/16/85 end date: 3/16/85
today's date: 3/16/85
price/volume data:(Yes)No
fundamental data:(Yes)No
earnings forecast:(Yes)No
S&P Report: Yes No
```

- 5 Press the ENTER key.

IBM's current stock quote, price/volume, and fundamental data from Media General Financial Services, and earnings forecasts from the Corporate Earnings Estimator™ database scroll onto your screen.


```

PAST EARN PR SH ESTIMATES (MEAN)
--WEEK AGO 12.10
--13 WEEKS AGO 12.31
--26 WEEKS AGO 12.28

-----
PRESS RETURN FOR NEXT PAGE
IBM
--FISCAL YEAR ENDS 12/86

EARNINGS PER SHARE ESTIMATES
--MEAN 14.03
--HIGH 14.30
--LOW 13.60
NUMBER OF ANALYSTS 12
P/E RATIO (ESTIMATED EPS) 9.55

PAST EARN PR SH ESTIMATES (MEAN)
--WEEK AGO 14.02
--13 WEEKS AGO N/A
 6 WEEKS AGO N/A
COMMAND: Bypass Capture Help Logoff Quotes Read Search Travel

```

The main Custom Menu returns with the final page of data.

Ending the Dow Jones Session

Ending the session

To end the Dow Jones session:

- Choose the Logoff command from the Dow Jones main Custom Menu.

Access disconnects you from Dow Jones and displays the Session menu.

Dow Jones News/Retrieval Commands

This section describes the Dow Jones Custom Menu commands in alphabetical order. Each command description includes what you see after choosing the command, the purpose of the command, and other information you may need.

COMMAND: Bypass Capture Help Logoff ~~Menu~~ Read Search Travel

Bypass

Takes you directly into the Dow Jones command mode, bypassing the Custom Menu.

Choose Bypass to view parts of the Dow Jones database not included in the Dow Jones Custom Menu.

Follow the instructions on line or in the Dow Jones user's guide. Press the MENU key (F10) to return to Access and the Dow Jones Custom Menu.

Bypass

Capture

CAPTURE filename: action:(Open)Close

Opens or closes a file for saving information.

Enter a filename in the "filename" field, using the filenaming conventions required by your operating system, or press any direction key to view a list of current filenames.

Choose "Open" in the "action" field when you want to start a new file or open a closed one. When a file is open you can use the CAPTURE ON/OFF key (F3) to toggle it closed and then open again to save information selectively.

Capture

Choose “Close” when you’re through capturing information to a file.

Help

Help

```
HELP: Resume Next Previous
      Commands Databases
```

Provides information about Dow Jones Custom Menu commands and tells you what command sequence to use to reach each of the databases.

Logoff

Logoff

Logs you off and disconnects you from Dow Jones. If you press Y at the prompt to confirm logoff, the Session menu reappears.

Quotes

Quotes

```
QUOTES: Averages Current Historical Portfolio Lookup
```

Shows stock, bond, U.S. Treasury issue, option, and mutual fund quotes, and the Dow Jones Averages. Sets up a portfolio of securities. Provides a way to look up ticker symbols on line.

Quotes Averages

Quotes Averages

```
QUOTES AVERAGES Dow Jones: Indust Trans Util Composite
start date: 3/17/85 end date: 3/17/85
today's date: 3/17/85
```

Shows the major Dow Jones Averages.

In the “Dow Jones” command field choose “Indust” for Dow Jones Industrials, “Trans” for transportation, or “Util” for utilities averages. Choose “Composite” when you want to view the averages of sixty-five stocks from transportation, industrials, and utilities.

Enter the start and end dates you want, then the current date; or accept the proposed responses.

Quotes Current

```
QUOTES CURRENT type: Stock Bond Option Mutual-Fund Treasury-Note Warrant
                  symbol 1: 2: 3:
                        4: 5:
```

Shows current securities quotes.

In the “type” field choose “Stock,” “Bond,” “Option,” “Mutual-Fund,” “Treasury-Note,” or “Warrant.”

In the “symbol” fields, enter ticker symbols for the securities you want to see.

Quotes Current

Quotes Historical

```
QUOTES HISTORICAL symbol: 
                  period: (Daily) Monthly Quarterly
                  start date: 3/17/85 end date: 3/17/85
                  today's date: 3/17/85
                  type: (Stock) Warrant
```

Shows prices for securities between given dates, and at specified intervals (daily, monthly, or quarterly).

In the “symbol” field enter the ticker symbol for the security you want to see. In the “period” field choose “Daily,” “Monthly,” or “Quarterly.”

Enter the start and end dates you want, then enter the current date; or accept the proposed responses.

In the “type” field, choose “Stock” or “Warrant.”

Quotes Historical

Quotes Lookup

Provides a way of looking up ticker symbols on line.

When you choose Lookup, Access puts you directly into the Dow Jones command mode.

Quotes Lookup

Follow the Dow Jones instructions on your screen for looking up ticker symbols. Press the MENU key (F10) to return to Access and the Custom Menu.

Quotes Portfolio

Quotes Portfolio

QUOTES PORTFOLIO					
stock	1	2	3	4	5
	6	7	8	9	10
bond	1	2	3	4	5
option	1	2	3	4	5
mutual fund	1	2	3	4	5
treasury note	1	2	3	4	5

Sets up a portfolio of securities, which Access stores in a file called DOWPORT.DAT and updates each time you choose the command.

Enter the ticker symbols of the securities you want in the numbered fields, according to type of security. After you press the ENTER key, Access displays current quotes for these securities.

To see updated quotes for the securities in your portfolio, choose the Quotes Portfolio command and press the ENTER key. If you want to change the portfolio, choose the Quotes Portfolio command and enter different ticker symbols.

Note When you change the ticker symbols, Access changes the portfolio file. You can maintain only one portfolio at a time.

Read

Read

READ: Analysis **NEWS** Statistics

Provides financial analyses, news, and economic statistics.

Read Analysis

Read Analysis

READ ANALYSIS: **Economic** Foreign-Exchange Investment Money W\$W

Provides expert commentary on business and the economy, including Dow Jones financial surveys, economic updates, money news, and Wall Street Week Online®.

Economic Weekly Economic Update.

Foreign-Exchange Forecasts or graphics of foreign exchange data.

Investment Merrill Lynch research reports.

Money Commentary, forecasts, and graphics.

W\$W “Wall Street Week” transcripts.

Note Choosing Economic, Investment, or W\$W puts you directly into the Dow Jones command mode. Follow the instructions on your screen for reading Economic, Investment, and “Wall Street Week” information. Press the MENU key (F10) to return to the Custom Menu.

Read News

Read News

READ NEWS: AP Film Japan Medical ~~Sports~~ WSJournal

Offers headlines and stories from the Dow Jones general news databases.

AP World news.

Film Cineman Movie Reviews.

Japan Japan Economic Daily™ from Kyodo News International, Inc. Enter an issue date up to five days previous.

Medical Medical news.

Sports Sports news.

WSJournal *The Wall Street Journal*. Enter an issue date up to five days previous.

Note Choosing one of these databases puts you directly into the Dow Jones command mode. Follow the instructions on your screen to see particular issues (choose from a list of dates), categories (choose the type of film review), or stories (choose from a list of headlines). Press the MENU key (F10) to return to the Custom Menu.

Read Statistics

Read Statistics

READ STATISTICS: **Economic**

Displays the Economic Update, a statistically oriented business database.

Note Read Statistics puts you directly into the Dow Jones command mode. Follow the instructions on your screen. Press the MENU key (F10) to return to Access and the Dow Jones Custom Menu.

Search

Search

SEARCH: **News** Database Text

The Search subcommands — Company, Database, and Text — represent different search processes. If you want all information available about a particular company from the Dow Jones financial databases, choose Company and supply the company name. If you want to search a particular source (for example, Dow Jones News) for information on a company or industry, choose Database. If you want information on a topic, choose Text.

Search Company

Search Company

```
SEARCH COMPANY company symbol: █
                current quote: Yes(No)
                stock price history: Daily Monthly Quarterly(No)
                start date: 3/17/85 end date: 3/17/85
                today's date: 3/17/85
                price/volume data: Yes(No)
                fundamental data: Yes(No)
                earnings forecast: Yes(No)
                S&P Report: Yes(No)
```

Searches for current quotes, quotes history, price/volume data, earnings, forecasts, fundamental data, and the Standard & Poors Report on a specific company.

In the “company symbol” field type the ticker symbol of the company about which you want information.

Choose “Yes” for each type of information or source you want searched.

The proposed start, end, and current dates are all the same — the date you last entered when you logged in to your computer. If you want a stock price history, choose “Daily,” “Monthly,” or “Quarterly,” and enter new start and end dates for the search. Correct “today’s date” or accept the proposed response.

Search Database

```
SEARCH DATABASE: DJNEWS MedGen SEC-Disclosure Lookup
```

Searches specific databases for information about a company or industry. The Lookup command calls up the DJNS symbol directory.

DJNews Provides headlines and stories from *The Wall Street Journal*, *Barron’s National Business and Financial Weekly*, and *Dow Jones News Service*. Enter a company ticker symbol.

MedGen Provides fundamental data and price/volume reports from Media General Financial Services. Enter a company ticker symbol.

SEC-Disclosure Provides corporate profiles, balance sheets, income statements, and other operating information. Enter a company ticker symbol.

Lookup Calls up the DJNS symbol directory. You can search for ticker symbol, company name, industry code, and other codes used for Dow Jones databases. Follow online instructions.

Note Choosing DJNews, SEC-Disclosure, or Lookup puts you directly into the Dow Jones command mode. Follow the online instructions and/or refer to your user’s guide. Press the MENU key (F10) to return to the Custom Menu.

MedGen will automatically return you to the Custom Menu.

Search Database

Search Text

```
SEARCH TEXT source: WSJournal DJNEWS
initial criteria:
```

Search Text

Searches The Wall Street Journal and Dow Jones News databases for information you request.

WSJournal *The Wall Street Journal.*

DJNews Abbreviated stories from *The Wall Street Journal*, *Barron's*, and *Dow Jones News Service* (the “Broadtape”).

You choose one of the two sources and enter a subject in the “initial criteria” field.

Note Refer to the Dow Jones user’s guide for more information. This service offers very sophisticated search processes, but your criteria must be correctly phrased according to Dow Jones text search instructions.

Press the ENTER key to begin the search.

After the search is completed, Dow Jones reports the number of documents found that contain your key word, and the Search Text Results menu appears. You can read the stories or continue the search by refining your criteria.

Search Text Results

Search Text Results

SEARCH TEXT: **View** Search New

View Shows the headlines or text of stories. Follow online instructions to read.

Search Continues the current search. Enter additional criteria to refine the search.

Refer to the Dow Jones user’s guide for instructions.

New Begins a new search. Enter new criteria.

Press the Esc key to return to the main menu.

Travel

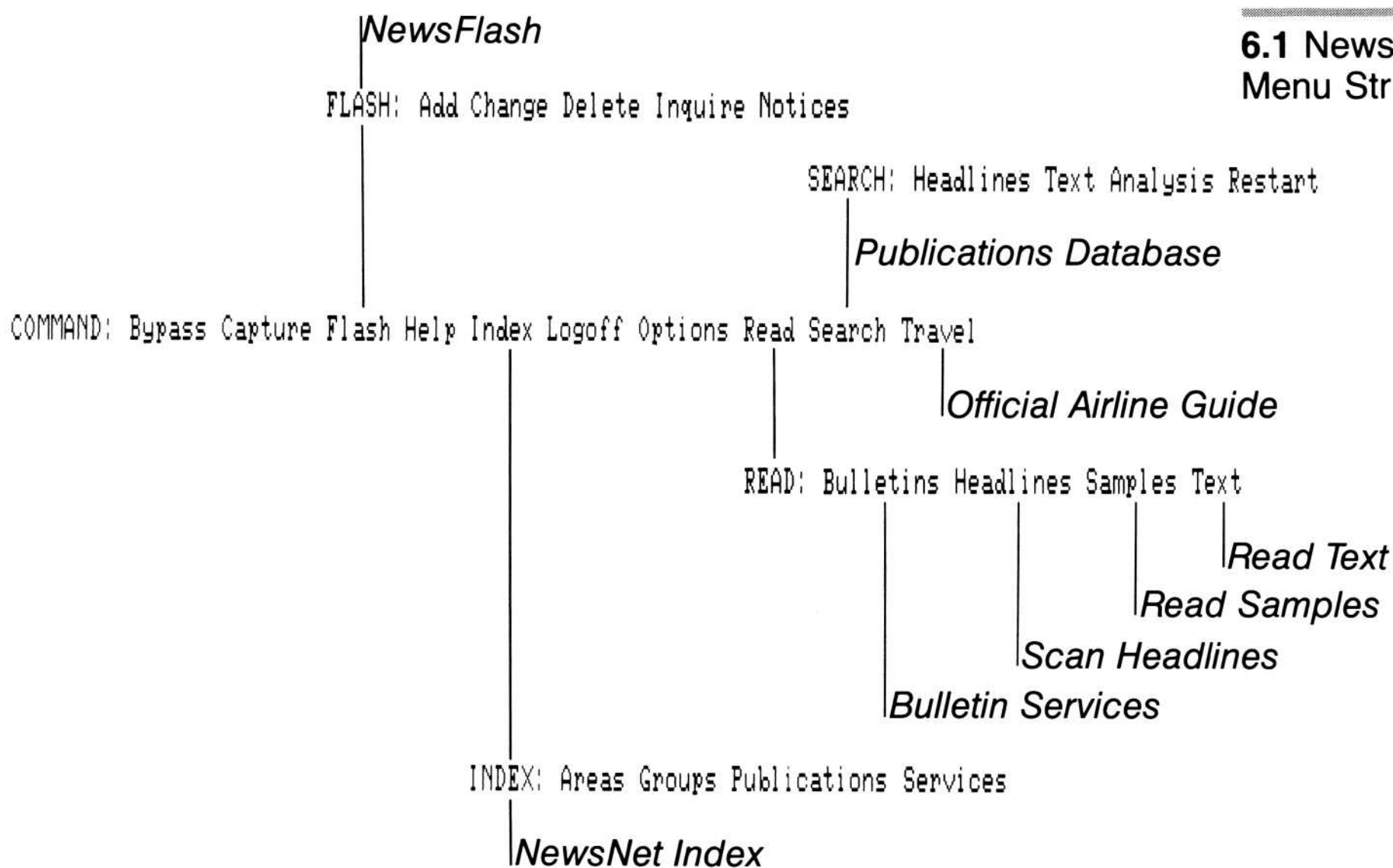
Travel

Transfers you to the Custom Menu for the Official Airline Guide (OAG). You can connect to OAG through Dow Jones by choosing this command; then you use the OAG Custom Menu exactly as if you had connected directly to it. See Chapter 7, “Official Airline Guide.”

6 NewsNet

The NewsNet database includes more than 200 industry-specific publications, containing abundant information on government, business, health, aerospace, and other specialized topics.

Microsoft Access makes using NewsNet easy. When you choose a Custom Menu command, such as Read or Search, Access translates it into a NewsNet command and brings the information you requested to the screen. The chart below illustrates the Custom Menu structure for NewsNet.



NewsNet can notify you when stories on particular subjects are added to its database. If you want to keep up-to-date and monitor new developments, you can set up a NewsFlash file. Each time you log in to NewsNet, you will see a Flash Alert listing the stories which have arrived since you last logged in.

In this chapter you will find instructions to guide you through an introductory session with NewsNet, followed by a descriptive summary of NewsNet Custom Menu commands.

In order to complete the examples in the next section, “Using NewsNet,” you must first subscribe to NewsNet and connect to it according to the procedure outlined in Chapter 1, “Using Access the First Time.”

For additional information about NewsNet, see the NewsNet user’s guide you received with your subscription.

Using NewsNet

This section introduces you to NewsNet and guides you through some sample tasks.

In this session you will learn how to:

- Read industry publications
- Search for information
- Set up a NewsFlash
- Read a NewsFlash story
- End a session

Before You Start

If you have not yet read the three chapters of “Getting Started,” do so now. You need to know how to:

- Choose and cancel commands
- Enter information in command fields
- Use the function keys
- Use the direction keys

You may also want to practice saving and printing the information you retrieve, or you may want to pause to read the information scrolling across your screen. These actions are described in Chapter 3, “Conducting Communications Sessions.”

When you are using the NewsNet Custom Menu and you want to interrupt what you are doing, press the Esc key twice. This stops the information scrolling onto your screen and cancels your request. The message “Enter Y to abort procedure, N to continue” appears. Press Y to stop the procedure and return to the main menu.

**If you want to
interrupt scrolling**

If you “time out”

Most services you connect to will automatically log you off (or “time out”) if they don’t receive input from you for a period of time — usually from two to five minutes, depending on the service. If you time out, NewsNet will display a message saying that you have been dropped by the system. Use the Logoff command from the Custom Menu to return to the Session menu, then use the Connect command from the Session menu to connect to NewsNet again.

The Custom Menu for NewsNet

When you have connected to NewsNet, Access logs you in and displays the main Custom Menu for NewsNet at the bottom of your screen.

```

COMMAND: Bypass Capture Flash Help Index
          Logoff Options NEED Search Travel
Select option or type command letter
NEWSNET          Scr                                     Access: NEWSNET 00:01:39 L2W1

```

Note If you have already set up a NewsFlash, a Flash Alert menu may appear instead of the main Custom Menu. The main Custom Menu will not appear until you have saved or discarded all the stories listed in the NewsFlash. See “Reading a NewsFlash Story” later in this section.

The following examples begin at the NewsNet main Custom Menu.

Reading Industry Publications

Reading industry publications

NewsNet classifies its publications by industry groups, each identified by a two-letter code. For example, Energy (EY) and Politics (PO) are industry groups. Each individual publication is identified by a four-character service code that consists of its industry code plus two digits. For example, the service code for *Federal Reserve Week* is FI01, indicating it is a financial publication.

You can also request a particular issue of any of NewsNet's hundreds of publications.

For example, to request an issue of *Federal Reserve Week*:

- 1 Choose Read.
- 2 Choose Text.

The Read Text command fields appear.

```
READ TEXT service: █
          date: latest
          update/chapter:
```

- 3 Type *fi01* (the service code for *Federal Reserve Week*) in the "service" field.
- 4 Accept the proposed response of "latest" in the "date" field to see the most recent version of *Federal Reserve Week*.
- 5 Press the ENTER key.

The entire current issue of *Federal Reserve Week* scrolls onto your screen.

The NewsNet main Custom Menu returns with the final page of information.

If you want to practice printing or capturing this information, refer to Chapter 3, "Conducting Communications Sessions."

Searching in Industry Publications

Searching in industry publications

NewsNet can search its entire database for articles on specified topics. You use the Search command to find and read these articles.

For example, to find an article on legislation:

- 1 Choose the Search command.

Access displays the Search command fields, prompting you for search criteria.

```
SEARCH keyword(s): 
start date:          end date:
service code 1:
service code 2:
service code 3:
```

- 2 Type *legislation* in the “keyword(s)” field.
- 3 Tab to the “start date” field and type *latest*
- 4 Tab to the “end date” field, and accept the proposed response of “latest.”
- 5 Tab to the “service code 1” field and type *TX12* (the service code for *Tax Notes Today*).
- 6 Press the ENTER key to begin the search. At the end of the search, NewsNet displays the number of occurrences of the word *legislation* for the latest issue of *Tax Notes Today* and the Search menu appears.

```
SEARCH: Headlines Text Analysis Restart
```

If your key word did not occur in that issue, you can choose Restart to expand the search to other issues or change the key word.

If the word did occur:

- 7 Choose Headlines.

You will see a numbered list of headlines for articles containing the word *legislation*.

The Search Headlines command fields appear.

- 8 Choose Display.
- 9 Type *1* in the “Display item numbers” field.
- 10 Press the ENTER key.

The first story about legislation scrolls onto your screen. The Search menu reappears at the end of the story.

- 11 Press Esc to return to the main menu.

Setting Up a NewsFlash File

Setting up a NewsFlash File

When you want to keep up-to-date on a particular subject, you can set up a NewsFlash file containing a key word or words and the publications you want searched.

Each time you log in to NewsNet, it checks your NewsFlash file and searches for current stories containing the key words you specified. If there are any new stories, you see a NewsFlash notification and a list of headlines. At the bottom of the screen, Access displays the Flash Alert menu, and you can read, save, or discard the stories. If there are no new stories and none saved from the last time, Access displays the NewsNet main Custom Menu.

- 1 First, decide on a key word and consider how many of the NewsNet publications you want to search. Since all new articles containing the word will be listed in your NewsFlash, a narrow topic will be more manageable than a broad one. See the NewsNet user's guide for helpful information about defining your search.

- 2 Choose the Flash command.

- 3 Choose Add.

The Flash Add command fields appear.

```
FLASH ADD keyword phrase: █
      service code:
      exception 1:      2:      3:      4:
```

- 4 Type the key word you want in the "keyword phrase" field.
- 5 Type either an industry or service code in the "service code" field. If you want to search all publications in the NewsNet database, type *all*
- 6 If you typed *all* in the "service code" field, you can exclude up to four industry groups or individual publications by typing their codes in the "exception" fields. Excluding irrelevant groups or publications will make the search go faster.
- 7 Press the ENTER key. Access sets up a NewsFlash file for you on NewsNet.

Your NewsFlash file can contain up to ten topics. To add a topic, choose Flash Add again and enter another key word and industry or service code.

Reading a NewsFlash story

Reading a NewsFlash Story

Your NewsFlash file becomes active at midnight of the day you set it up. When you log in the next day, NewsNet searches all the new information added to its database for stories containing the key word or phrase you entered. If it finds any, it notifies you with a NewsFlash. You may not receive your first NewsFlash for a day or two, until new stories on your topic have arrived. To read a NewsFlash story:

- 1 Log in to NewsNet.

If any new stories have arrived since you last logged in, the Flash Alert menu appears below a list of headlines displayed in groups of five.

The Read command is highlighted.

```
FLASH ALERT option! Read Save Discard
Read/Save item numbers!
```

- 2 To read the first article, type *1* in the “Read/Save item numbers” field

or

type *all* to read all five of the first group.

- 3 Press the ENTER key.

When you have finished reading, the Flash Alert menu reappears.

- 4 Save or discard the first five stories.

The next group of five headlines will scroll onto your screen when you have saved or discarded all of the first group. Read, save, or discard the stories until you reach the end of the list. The ones you save will continue to appear with every NewsFlash until you discard them.

Ending the NewsNet Session

Ending the session

To end the NewsNet session:

- Choose the Logoff command from the main Custom Menu.

Access disconnects you from NewsNet and displays the Session menu.

NewsNet Commands

This section describes the NewsNet Custom Menu commands in alphabetical order. Each command description includes what you see after choosing the command, the purpose of the command, and other information you may need.

If you have set up a NewsFlash, a Flash Alert menu may appear instead of the main Custom Menu. The main Custom Menu will not appear until you have saved or discarded all the stories listed in the NewsFlash. See “Reading a NewsFlash Story” in this chapter.

```
COMMAND: Bypass Capture Flash Help Index
         Logoff Options MENU Search Travel
```

Bypass

Takes you directly into the NewsNet command mode, bypassing the Custom Menu.

Choose Bypass to view parts of the NewsNet database not included in the NewsNet Custom Menu.

Follow the instructions on line or in the NewsNet user's guide. Press the MENU key (F10) to return to Access and the NewsNet Custom Menu.

Bypass

Capture

```
CAPTURE filename: ■          action:(Open)Close
```

Opens or closes a file for saving information.

Enter a filename in the “filename” field, using the filenaming conventions required by your operating system, or press any direction key to view a list of current filenames.

Capture

Choose “Open” in the “action” field when you want to start a new file or open a closed one. When a file is open you can use the CAPTURE ON/OFF key (F3) to toggle it closed and then open again to save information selectively.

Choose “Close” when you’re through capturing information to a file.

Flash

Flash


```
FLASH:  Change Delete Inquire Notices
```

Sets up or modifies a NewsFlash file.

If you set up a NewsFlash (see “Using NewsNet”), NewsNet searches for news articles in publications you specify. When it finds new articles, it notifies you when you next log in.

Flash Add

Flash Add

```
FLASH ADD keyword phrase: 
      service code:
      exception 1:      2:      3:      4:
```

Adds a new subject and publication to your NewsFlash file.

Type a topic in the “keyword phrase” field. For length limitations, see your NewsNet user information.

In the “service code” field type an industry or service code listed in NewsNet. If you want all the NewsNet publications searched, type *all*. If you want to exclude industry groups or individual publications that are unlikely to contain information on your topic, type their codes in the “exception” fields.

Flash Alert

Flash Alert

```
FLASH ALERT option:  Save Discard
      Read/Save item numbers:
```


If you have set up a NewsFlash file and there are new stories for you, the first screen that appears when you log in includes a list of headlines and the Flash Alert menu.

The Flash Alert menu provides options to read, save, or discard the stories.

Flash Alert Read

Displays one or more of the stories from the list of headlines.

Type in a number from the list, or two or more numbers separated by commas—for example, *1,2,4*. Type *all* to read all the stories in the first group of five.

Flash Alert Save

Saves a story in your NewsFlash file. The headline will appear in all subsequent NewsFlashes until you discard it. Type in a number from the list, or two or more numbers separated by commas—for example, *1,2,4*. Type *all* to save all five stories.

Flash Alert Discard

Discards the stories in your NewsFlash file, except the ones you have saved.

Flash Change

Flash Change

```
FLASH CHANGE number:
               keyword phrase: █
               service code:
               exception 1:      2:      3:      4:
```

Modifies a key word in your NewsFlash file.

First shows a numbered list of your current key words. If you want to change a key word, type its number in the “number” field. Then type in the new key word or phrase in the “keyword phrase” field. In the “service code” field type an industry or service code. Type *all* if you want all the NewsNet publications searched; if you want to exclude industry groups or publications which are unlikely to contain information on your topic, type their codes in the “exception” fields.

Flash Delete

Flash Delete

```
FLASH DELETE item:
```

Deletes a key word in your NewsFlash file.

Type in the number of the key word or phrase you want to delete.

Flash Inquire

Flash Inquire

Lists your NewsFlash key words.

Flash Notices

Flash Notices

```
FLASH NOTICES option: Read Save Discard
Read/Save item numbers:
```

Displays the headlines of NewsFlash stories that arrived while you were on line, but after you logged in and read your initial NewsFlash notification. Also shows the headlines of stories you previously saved.

Flash Notices Read

Displays one or more of the stories from the list of headlines. Type in a number from the list, or two or more numbers separated by commas — for example, *1,2,4*. Type *all* to read all the stories in the first group of five.

Flash Notices Save

Saves a story in your NewsFlash file. The headline will appear in all subsequent NewsFlashes until you discard it. Type in a number from the list, or two or more numbers separated by commas — for example, *1,2,4*. Type *all* to save all five stories.

Flash Notices Discard

Deletes the stories in your NewsFlash file, except the ones you have saved.

Help

HELP: ~~Resume~~ Next Previous
Commands Databases

Provides information about NewsNet Custom Menu commands and tells you what command sequence to use to reach each of the databases.

Index

INDEX: Areas Groups Publications ~~SERVICES~~

Lists the current NewsNet publications and their industry groups and service codes. Also lists the contents and rates of individual publications.

Index Areas

INDEX AREAS industry code 1: █
 industry code 2:
 industry code 3:

Produces a list of the publications included in each industry group, and the service code for each listed publication. You type in the industry group codes.

Index Groups

Produces a list of the NewsNet industry groups and their two-letter codes.

Index Publications

Produces a list of all the NewsNet publications and their rates.

Help

Index

Index Areas

Index Groups

Index Publications

Index Services

Index Services

```
INDEX SERVICES service code 1: █
                service code 2:
                service code 3:
```

Describes the content of individual publications and industry groups.

Type the service or industry codes you want in the “service code” command fields to get a description of individual publications or industry categories.

Logoff

Logoff

Logs you off and disconnects you from NewsNet. If you press Y at the prompt to confirm logoff, you return to the Session menu.

Options

Options

```
OPTIONS stop at each page: Yes ☒
```

Turns screen scrolling off or on.

You can choose the Options command at any time during a NewsNet session when you want to change the scrolling. The default scrolling is “No,” or continuous screen scrolling. When you want scrolling to stop at each page, choose “Yes”.

Read

Read

```
READ: Bulletins ☒ Newslines ☒ Samples Text
```

Displays NewsNet bulletins, news headlines, and publications.

Read Bulletins

```
READ BULLETINS service! █
                  class!(Current)Previous
```

Provides NewsNet bulletins. Bulletins have a service code ending in “#”.

In the “service” field, enter the service code of the bulletin you want to read. Type *all* if you want to read all bulletins.

In the “class” field, choose “Current” to read the most up-to-date bulletins, or “Previous” to read past bulletins.

Read Bulletins

Read Headlines

```
READ HEADLINES service code! █
                  date! LATEST
                  update/chapter!
```

Produces a list of headlines from a given publication. Select from the list to view the contents of the story.

In the “service code” field type a service or industry code.

In the “date” field, type the date of the issue you want if you know its exact date. Otherwise, you can accept the proposed latest issue or type in *earliest* to see the earliest issue kept in the NewsNet database. Do not enter a date if your journal is encyclopedic.

Enter an “update/chapter” number only if you have entered an encyclopedic or time-oriented publication in the “service code” field. Encyclopedic publications end their service codes with an “E” and require a chapter number. Time-oriented publications (usually newspapers) end their service codes with “T” and require an update number.

Use the Index command to read a complete list of publication codes.

Read Headlines

Read Samples

Read Samples

```
READ SAMPLES service code: █
```

Shows samples of NewsNet publications.

Enter the service code of a publication. There is no surcharge for reading samples.

Read Text

Read Text

```
READ TEXT service: █  
          date: latest  
          update/chapter:
```

Provides the complete text of the publication you request to read.

In the “service” field enter the service code of a publication. If you know the exact date of the issue you want, type it in the “date” field. Otherwise, accept the proposed latest issue or type in *earliest*. Do not enter a date if your journal is encyclopedic.

Enter an “update/chapter” number only if you have entered an encyclopedic or time-oriented publication in the “service code” field. Encyclopedic publications end their service codes with an “E” and require a chapter number. Time-oriented publications (usually newspapers) end their service codes with “T” and require an update number.

Use the Index command to read a complete list of publication codes.

Search

Search

```
SEARCH keyword(s): █  
          start date:          end date:  
          service code 1:  
          service code 2:  
          service code 3:
```

Searches various publications for any type of information.

Enter a topic in the “keyword(s)” field. Refer to the NewsNet user’s guide for instructions and information about defining search criteria.

In the “start date” field, enter a date or accept the proposed response of “earliest.” In the “end date” field, enter a date or accept the proposed response of “latest.”

Enter one or more service or industry codes in the “service code” fields. You can type *all* in one of the “service code” fields for all industry and service codes.

After you type in this information, NewsNet searches for your key word in the publications you specified. At the end of the search, the Search menu appears.

```
SEARCH: Headlines Text Analysis Restart
```

NewsNet tells you how many stories it found containing your key word(s). Choose Headlines or Text to begin reading the stories.

If the search produced too many or too few articles, choose Analysis for information about the search that may help you decide how to modify your criteria.

Choose Restart to expand the search to other issues or change the key word.

Press Esc to return to the main menu.

Search Analysis

Produces a list of the publications consulted during the search and the number of occurrences of the key words in each. Read this analysis before you look at headlines or text to decide whether you want to broaden or restrict your search. The Search menu returns to the screen after you choose Search Analysis, so you can view stories or restart your search.

Search Analysis

Search Headlines

```
SEARCH HEADLINES options: DEFE Continue Restart
                        Display item numbers!
```

Produces a list of headlines from which you can select a story to read.

Display Displays one or more of the stories from the list of headlines. Type one or more numbers from the headlines list in the “Display item numbers” field. Type in a number from the list, or two or more numbers separated by commas — for example, *1,2,4*. Type *all* to read all the articles listed.

Continue Shows you the next screenful of headlines if there is more than one publication named in the Search command fields.

Restart Returns you to the Search command fields, so you can enter additional service codes or different key words.

Search Restart

Search Restart

Returns you to the Search command fields, so you can enter additional service codes or different key words.

Search Text

Search Text

Produces the text of the stories found in the search.

Travel

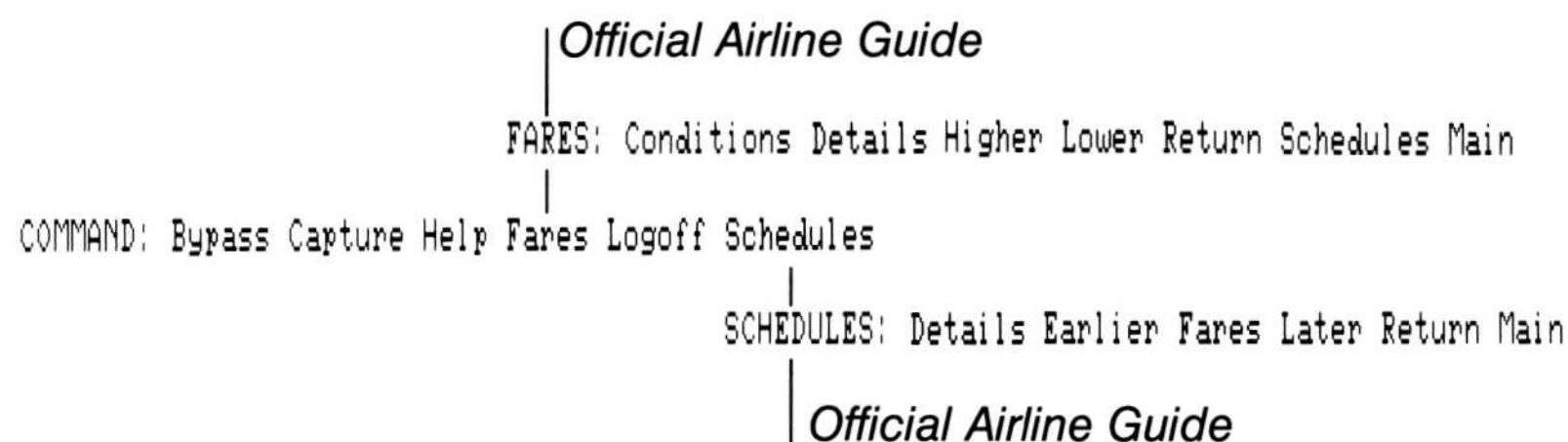
Travel

Transfers you to the Custom Menu for the Official Airline Guide (OAG). You can connect to OAG through NewsNet by choosing this command; then you use the OAG Custom Menu exactly as if you had connected to it directly. See Chapter 7, “Official Airline Guide.”

7 Official Airline Guide

The Official Airline Guide (OAG) provides up-to-date online information about commercial air travel around the world. With Microsoft Access Custom Menu commands you can look up most of the details you need to plan your trips, including schedules, fares, return flights, connecting flights, and meals and other services.

When you choose a Custom Menu command, such as Schedules, Access translates it into an OAG command and brings the requested information to the screen. The chart below illustrates the Custom Menu structure for OAG.



7.1 OAG Custom Menu Structure

This chapter guides you through a sample session with OAG, then provides a summary of OAG Custom Menu commands.

In order to complete the examples in the sample session, you must first subscribe to OAG and connect to it according to the procedure outlined in Chapter 1, "Using Access the First Time." You can also connect to OAG by using the Travel command in the Custom Menus for CompuServe, Dow Jones News/Retrieval, and NewsNet.

Using the Official Airline Guide

This section introduces you to using the Official Airline Guide and takes you through some sample tasks.

In this session you will learn how to look up:

- Departing flights
- Return flights
- Fares
- Details such as meal service and plane type

Before You Start

If you have not yet read the three chapters of “Getting Started,” do so now. You need to know how to:

- Choose and cancel commands
- Enter information in command fields
- Use the function keys
- Use the direction keys

In addition, you may want to practice saving and printing the information you retrieve, or you may want to pause to read the information scrolling across your screen. These actions are described in Chapter 3, “Conducting Communications Sessions.”

If you want to interrupt scrolling

When you are using the OAG Custom Menu and you want to interrupt what you are doing, press the Esc key twice. This stops the information scrolling onto your screen and cancels your request. The message “Enter Y to abort procedure, N to continue” appears. Press Y to stop the procedure and return to the main Custom Menu.

Most services you connect to will automatically log you off (or “time out”) if they don’t receive input from you for a period of time — usually from two to five minutes, depending on the service. If you time out, OAG will display a message saying that you have been dropped by the system. Use the Logoff command from the Custom Menu to return to the Session menu, then use the Connect command from the Session menu to connect to OAG again.

When you have connected directly to OAG or have chosen the Travel command from the CompuServe, Dow Jones, or NewsNet Custom Menu, Access displays the OAG main Custom Menu at the bottom of your screen.

If you “time out”

The Custom Menu for OAG

```

COMMAND: Bypass Capture Help Fares Logoff SCHEMULES
Select option or type command letter
OAG          Scr          Access: COMPUSV  OFFLINE  L1W1

```

The following examples begin at the OAG main Custom Menu.

Looking Up Flight Information

To look up departing flights

To get a schedule of departing flights:

- 1 Choose the Schedules command.

The Schedules command fields appear, prompting you for departure and arrival information.

```
SCHEDULES depart city: 
           arrive city: 
           depart date: 
           depart time: 7A
```

- 2 Type *seattle* (or *sea*) in the “depart city” field.

You can use either the three-letter airport code or the city’s name, in uppercase or lowercase letters. You can also press any direction key to see a list of major U.S. cities, and then select from the list.

- 3 Tab to “arrive city” and type *los angeles* (or *lax*).

- 4 Enter a departure date in the “depart date” field.

- 5 Enter an approximate time in the “depart time” field, or accept the proposed response of “7A” for 7 A.M.

- 6 Press ENTER.

A list of flights from Seattle to Los Angeles scrolls onto your screen, and Access displays the Schedules menu.

```

          DIRECT FLIGHTS      FRI-20 JUN
FROM-SEATTLE;TACOMA,WA,USA
# TO-LOS ANGELES,CA,USA
1  645A SEA 903A LAX UA 219 72S B 0
2  645A SEA 1011A LAX OC 720 73S S 1
3  650A SEA 1012A LAX OC 814 73S S 1
4  700A SEA 915A LAX AS 170 72S B 0
5  700A SEA 922A LAX PS 300 M80 S 0
6  705A SEA 1020A LGB AS 100 727 B 1
ENTER
```

SCHEDULES: **RETURN** Earlier Fares Later Return Main

Note You may have to wait a few moments for the information you requested. If OAG cannot locate the information, it will display a message to that effect, and Access will return you to the main Custom Menu.

To look up the fare for the flight you want:

- 1 Choose Fares from the Schedules menu.
- 2 Type 1 in the “selection” field.

OAG displays the fare options for the first flight.
The Schedules Fares menu reappears.

To look up fares

```
F1
FARES IN US DOLLARS      FRI-20 JUN
SELECTED FOR SEA-UA 219 LAX

# ONE-WAY RND-TRP ARLN/CLASS FARECODE
NO LOWER FARES IN CATEGORY
1*      218.00    UA/Q    QE30X23
2*      218.00    UA/Q    QH7FLYUA
3*      280.00    UA/B    BE70
4*  200.00      UA/Y    Y
5*  210.00      UA/Y    Y
6*  250.00      UA/F    F
7*  273.00      UA/F    F
NO HIGHER FARES IN CATEGORY
* ENTER
```

SCHEDULES FARES: Conditions **DET** Higher Lower Return Schedules

To find out what limitations are placed on the fare you want:

- 1 Choose Conditions from the Schedules Fares menu.
- 2 Type 1 in the “selection” field to see the fare limitations for the first flight.

A description of the limitations on ticket purchase or travel for that fare scrolls onto the right half of your screen, and the Schedules Fares menu reappears.

- 3 Choose Schedules to return to the main Schedules menu.

To look up fare limitations

To look up return flights

To look up return flights:

- 1 Choose Return from the Schedules menu.
- 2 Enter a return date in the “depart date” field.

Access saved the city names you typed in for departure schedules and reversed them for return schedules. You now see a list of flights from Los Angeles to Seattle.

The Schedules menu returns.

To look up flight details

To find out the flight number, the type of plane, whether or not there will be meal service, and other details:

- 1 Choose Details from the Schedules menu.
- 2 Type *1* in the “selection” field.

Now you see a list of flight details for the first return flight on the right half of your screen.

Whenever a list of departing or return flights is on your screen, you can choose Details from the Schedules or Fares menus for information about the listed flights.

- 3 Choose Main to return to the main Custom Menu.

Ending the OAG Session

Ending the session

To end the OAG session:

- Choose the Logoff command from the OAG main menu.

Access disconnects you from OAG and displays the Session menu.

If you have connected to OAG through CompuServe, Dow Jones News/Retrieval, or NewsNet, when you log off from OAG you will return to the main Custom Menu for the service through which you were using OAG.

Official Airline Guide Commands

This section describes the OAG Custom Menu commands in alphabetical order. Each command description includes what you see after choosing the command, the purpose of the command, and other information you may need.

COMMAND: Bypass Capture Help Fares Logoff **SCHEDULES**

Bypass

Takes you directly into the OAG command mode, bypassing the Custom Menu.

Choose Bypass to use parts of the OAG database not included in the OAG Custom Menu.

Follow the instructions on line or in the OAG user's guide. Press the MENU key (F10) to return to Access and the OAG Custom Menu.

Bypass

Capture

CAPTURE filename: action:(Open)Close

Opens or closes a file for saving information.

Enter a filename in the "filename" field, using the filenaming conventions required by your operating system, or press any direction key to view a list of current filenames.

Choose "Open" in the "action" field when you want to start a new file or open a closed one. When a file is open you can use the CAPTURE ON/OFF key (F3) to toggle it closed and then open again to save information selectively.

Choose "Close" when you have finished capturing information to the file.

Capture

Fares

Fares

```

FARES depart city: █ arrive city:
      depart date: return date:
      depart time: 7A
      class:(Coach)First Both Excursion All

```

Produces a list of fares, including flight numbers and classes, for flights to your destination.

Enter your cities of departure and arrival in the “depart city” and “arrive city” fields. Press any direction key to see a list of cities and their airport codes. Select from the list or enter the three-letter airport code, or the partial or full name of the city if it is not on the list.

Enter a departure date, a return date, and a departure time. Choose a flight class.

After you enter this information, a Fares menu and a numbered list of fares appears on your screen.

```

FARES: Conditions DETAILS Higher Lower Return Schedules Main

```

For additional information, choose from the Fares menu. Choose Main to return to the main Custom Menu.

Fares Conditions

Shows conditions or limitations on a particular fare. Type one or more numbers from the fares list into the “selection” field.

Fares Details

Shows flight details such as travel time, type of plane, and meal service. Type one or more numbers from the fares list into the “selection” field.

Fares Higher

Produces a list of flights with higher fares than the ones currently displayed.

Fares Lower

Produces a list of flights with lower fares than the ones currently displayed.

Fares Return

Lists return flights for the date you enter in the “date” field. Access remembers your cities of departure and arrival and reverses them to look for return flights.

Fares Schedules

Shows a list of flights to your destination on the date you entered previously and at the fare you enter now in the “selection” field, then displays the Fares Schedules menu.

FARES SCHEDULES: Conditions **DETAILS** Fares Return

- Conditions** Shows limitations on that fare.
- Details** Shows details about that flight.
- Fares** Returns you to the Fares menu.
- Return** Shows return flights at that same fare and then returns you to the Fares menu.

Fares Main

Returns you to the main Custom Menu.

Help

Help

HELP: **Resume** Next Previous
Fares Schedules

Provides information about OAG Custom Menu commands.

Logoff

Logoff

Logs you off and disconnects you from OAG. If you choose Y at the prompt to confirm logoff, the Session menu reappears.

Schedules

Schedules

```
SCHEDULES depart city: █
           arrive city:
           depart date:
           depart time: 7A
```

Produces a list of flights to your destination for the date and time you type in.

The Schedules menu appears at the bottom of the list of flights.

```
SCHEDULES: DETAILS Earlier Fares Later Return Main
```

For additional information, choose from the Schedules menu.

Schedules Details

Shows details about a particular flight. Type one or more numbers from the list of flights.

Schedules Earlier

Produces a list of earlier flights if any are available.

Schedules Later

Produces a list of later flights if any are available.

Schedules Fares

Produces a list of fares for a particular flight. After choosing Schedules Fares, you type the number of a flight in the “selection” field. Access displays a list of the fares available for that flight, and shows the Schedules Fares menu at the bottom of your screen.

SCHEDULES FARES: Conditions **Details** Higher Lower Return Schedules

Choose from this menu for further information about the fare you want for that flight.

Conditions Shows limitations on that fare.

Details Shows details about that flight.

Higher Shows a list of higher fares.

Lower Shows a list of lower fares.

Return Shows return flights for the date you enter in the “return date” field, and returns you to the Schedules menu.

Schedules Returns you to the Schedules menu.

Schedules Return

Shows a list of return flights. Enter a return date according to the format indicated on the status line. Access remembers your cities of departure and arrival, and reverses them to look for return flights.

Schedules Main

Returns you to the main Custom Menu.

8 Mail

The Microsoft Access Mail program manages your correspondence for two mail vendors: Western Union Easylink and MCI Mail. With Mail's Custom Menu commands you can:

- Create, save, print, and reply to messages
- Set up message centers — directories within Mail — to handle messages for different accounts
- Use mailing lists
- Send messages in batches
- Select the individual message(s) you want to send and receive
- Choose to be notified when your message has arrived
- Send charts and spreadsheets
- Create Address Books — lists of addresses for recipients of electronic messages

With Mail you type all your correspondence before you connect to a vendor. Mail provides a text editing program called the Editor (an adaptation of Microsoft Notepad) for typing and editing your correspondence. If you want to use any other word processing program with Mail (Microsoft Word, for example), see “Using Another Editor” in this chapter.

When you subscribe to a mail vendor you receive information about the delivery services it offers, such as telex, electronic mail, or paper delivery. Mail has fully automated all the delivery services; you simply choose a Custom Menu command for the type of delivery you want.

In the following section, “Using Mail,” you will find instructions for using Mail's Custom Menu commands to start the Mail program, set up your first message center, and create and send a message. You will also find information on editing, receiving, reading, printing, and forwarding messages, and creating an Address Book. The chapter concludes with a summary of the Mail Custom Menu commands.

Using Mail

If you haven't already done so, read Chapter 1, "Using Access the First Time," to learn the basics of using Custom Menus, including how to choose and cancel commands, enter information into command fields, and use the direction keys.

Before you begin using Mail, you need to:

- Subscribe to one or more of the mail vendors
- Enter the settings and login information for these vendors by one of the methods described in Chapter 1

You may want to have the user information from your vendor ready to refer to while reading this chapter.

How Mail Works

Message centers

The Mail program organizes your correspondence within *message centers*. Each message center contains four directories, called the *Desk*, *Inbox*, *Outbox*, and *Folder*. When you start Mail the first time, you set up your first message center by giving it a name — your name, for example — and Mail adds the Desk, Inbox, Outbox, and Folder. Once you have a message center, you can:

- Create, edit, address, and stamp messages in the Desk
- Receive messages in the Inbox
- Send messages from the Outbox
- Store messages in the Folder

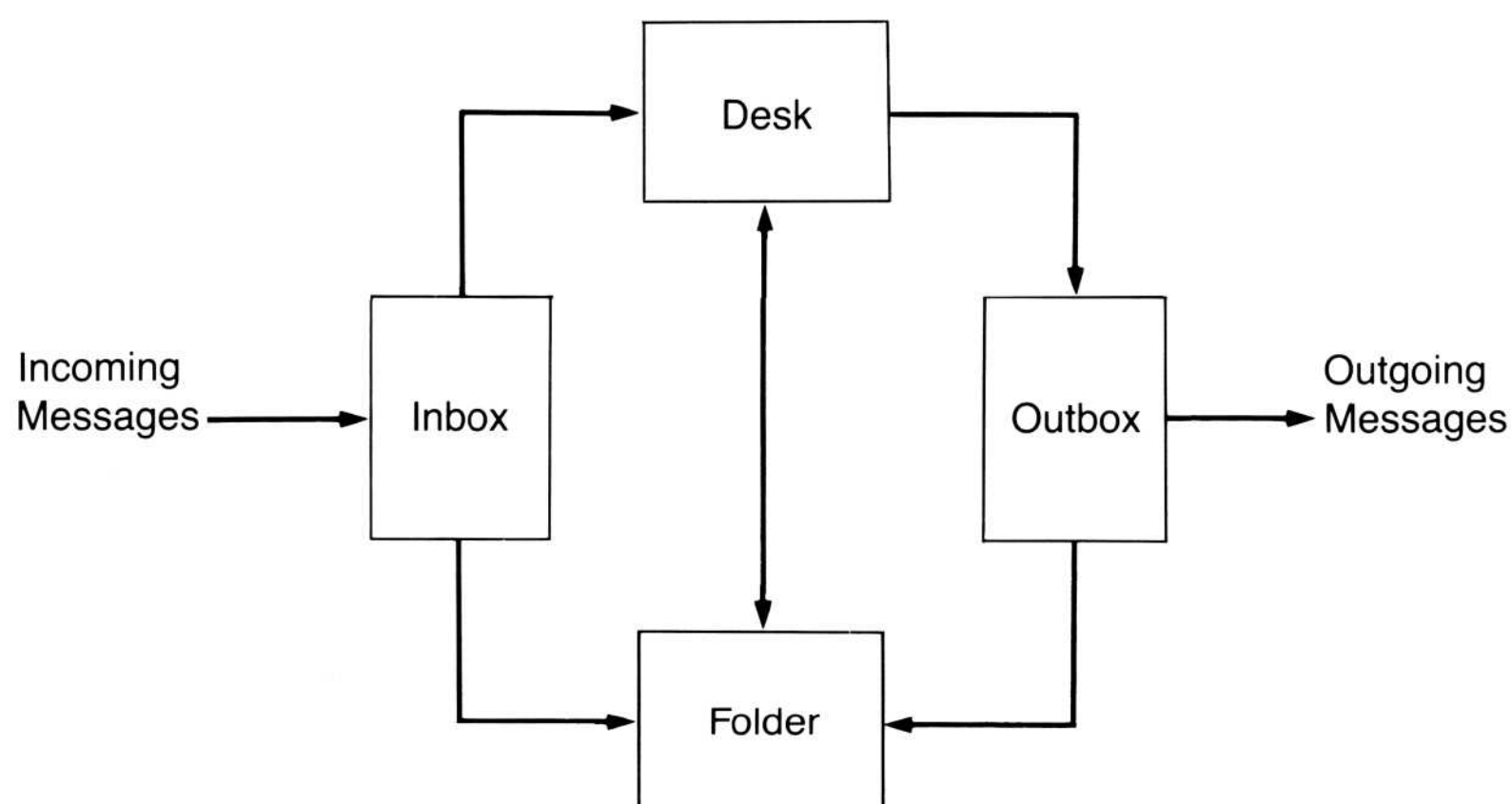
A message center handles one account for each vendor. For example, if you have accounts with MCI and Western Union, your message center would include those two accounts. You can set up additional message centers for each individual or activity that needs to have a separate account with the same vendors. For example, a secretary can manage all the electronic correspondence for several people in an office by naming a message center for each of them.

There are other advantages to using message centers:

- You can keep different accounts on the same disk.
- You need not change the login information and settings each time you use a different account — all you have to do is switch to a different message center, where the appropriate information is stored.
- You can have as many message centers as you want; the only restriction is disk space.

As you work with your correspondence, you move a message from one part of the message center to another. For example, to forward a message you have received, you first transfer it from the Inbox to the Desk. You can edit it and address it in the Desk, then transfer it to the Outbox when it is ready to send.

The diagram below shows the various paths a message can take through the message center.



8.1 Paths through a Message Center

To start Mail the first time

Starting Mail

When you start Mail the first time, you set up your first message center.

- 1 If your computer has two floppy-disk drives, put the Access program disk in drive A and the Mail disk in drive B.

If your computer has a hard disk and one floppy-disk drive, be sure to copy the Mail program and the Editor to your hard disk using MACOPY (described in the first part of this manual).

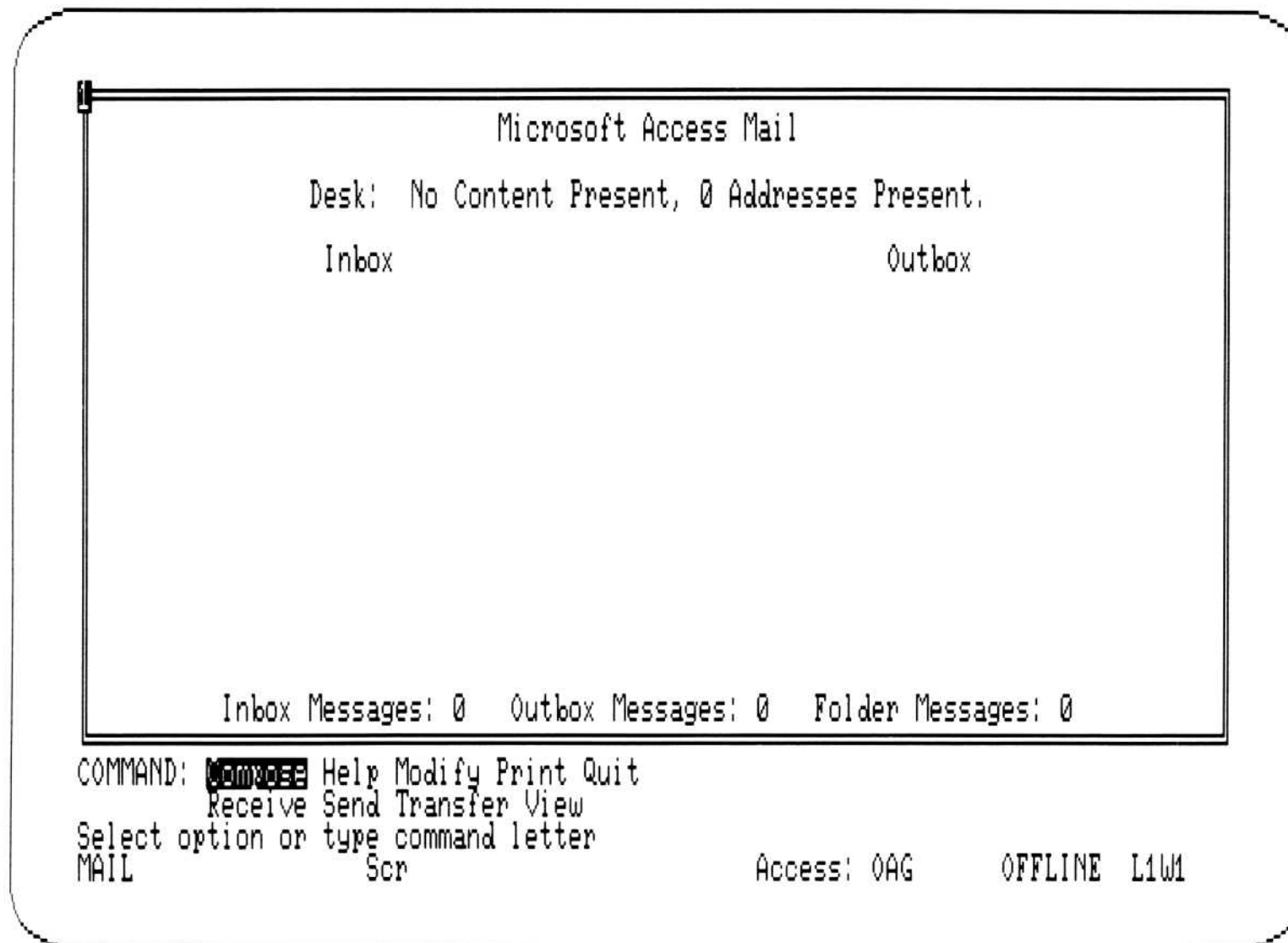
- 2 Start Access.
- 3 Choose the Run command.
- 4 Choose Script.
- 5 Type *mail* in the “filename” command field.
- 6 Press the ENTER key.

After you carry out the Run Script command, Mail asks you for the name of your first message center.

- 7 In the “using initial message center” field, type a message center name, using up to eight letters, but no spaces — for example, *virginia*
- 8 Press the ENTER key.

Mail uses the name you typed to create a message center directory. On a floppy disk, the directory name is the message center name you typed. On a hard disk it is a subdirectory of the \MSTOOLS directory — for example, \MSTOOLS\VIRGINIA. When you use the Mail program, you will be in this directory and will use the Desk, Inbox, Outbox, and Folder of this message center until you set up another one with Mail’s Modify command.

Now Mail displays its first screen, with the main Custom Menu at the bottom.



To start Mail any time after the first time:

- 1 If your computer has two floppy-disk drives, put the Access program disk in drive A and the Mail disk in drive B.
- 2 Start Access.
- 3 Choose the Run command.
- 4 Choose Script.
- 5 Type *mail* in the “filename” field. Or press any direction key to view the list of scripts and highlight “Mail.”
- 6 Press the ENTER key.

The main Custom Menu for Mail appears. You start in the message center you last used, and the screen shows the number of messages in each directory.

To start Mail after the first time

Creating a Sample Message

When you want to send a message through electronic mail, you first create the message in the Desk. In this section you will learn how to type, address, and “stamp” a message (put it in the Outbox), but you will not actually send it, since you would be charged by the vendor for that service. To send a message, see “Sending Messages” later in this chapter. See Chapter 19, “Using the Editor,” for more information on the Editor.

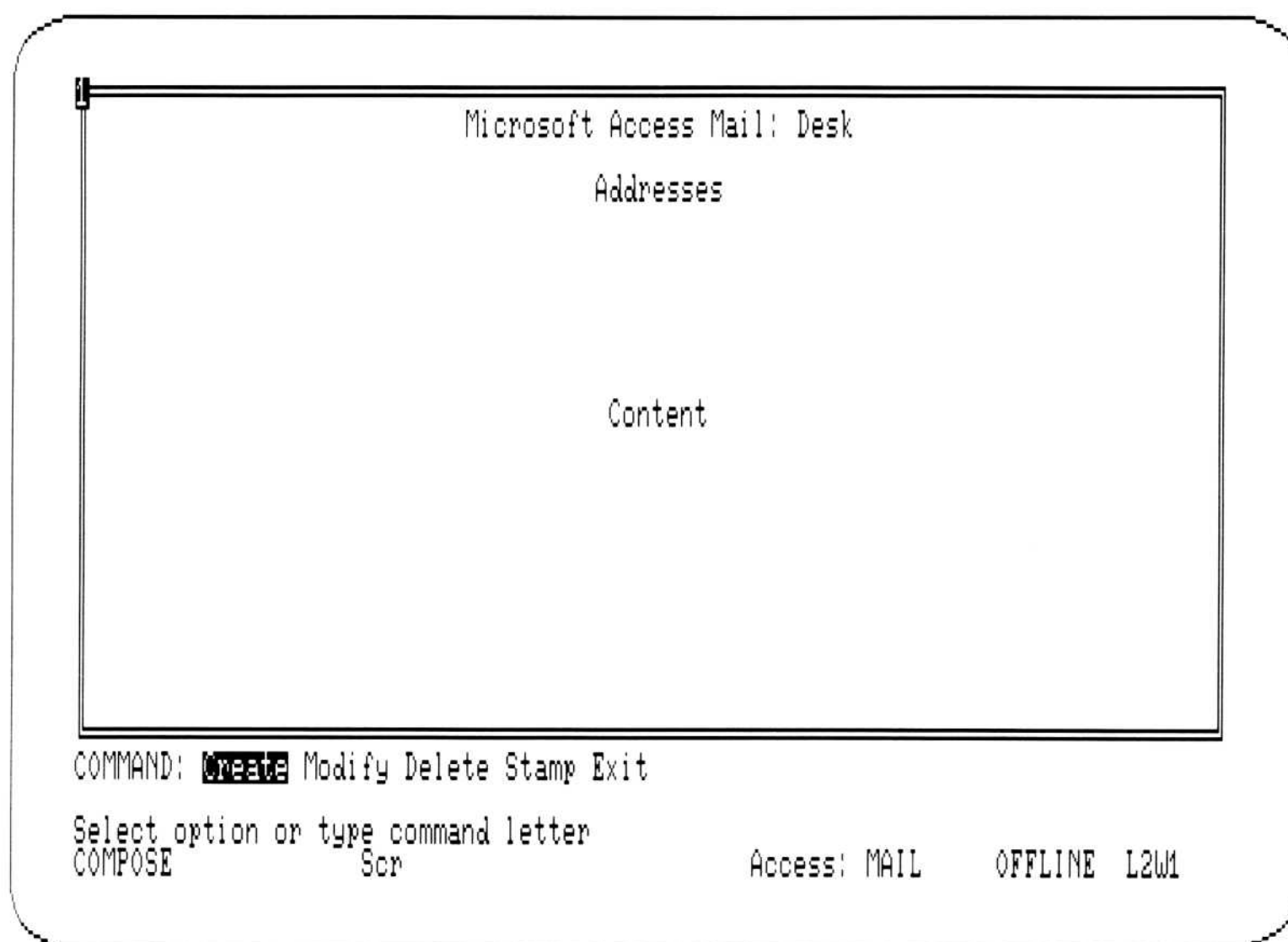
Starting the Editor

To start the Editor

You use the Editor to type a message. To start the Editor:

- 1 Choose the Compose command. (It is highlighted; simply press the ENTER key.)

The Desk screen appears, with the Compose menu at the bottom of the screen, and *COMPOSE* appears on the status line.



- 2 Choose the Create command.
- Mail displays the Create menu.

CREATE: **Draft** Reply Address List

- 3 Choose Draft.

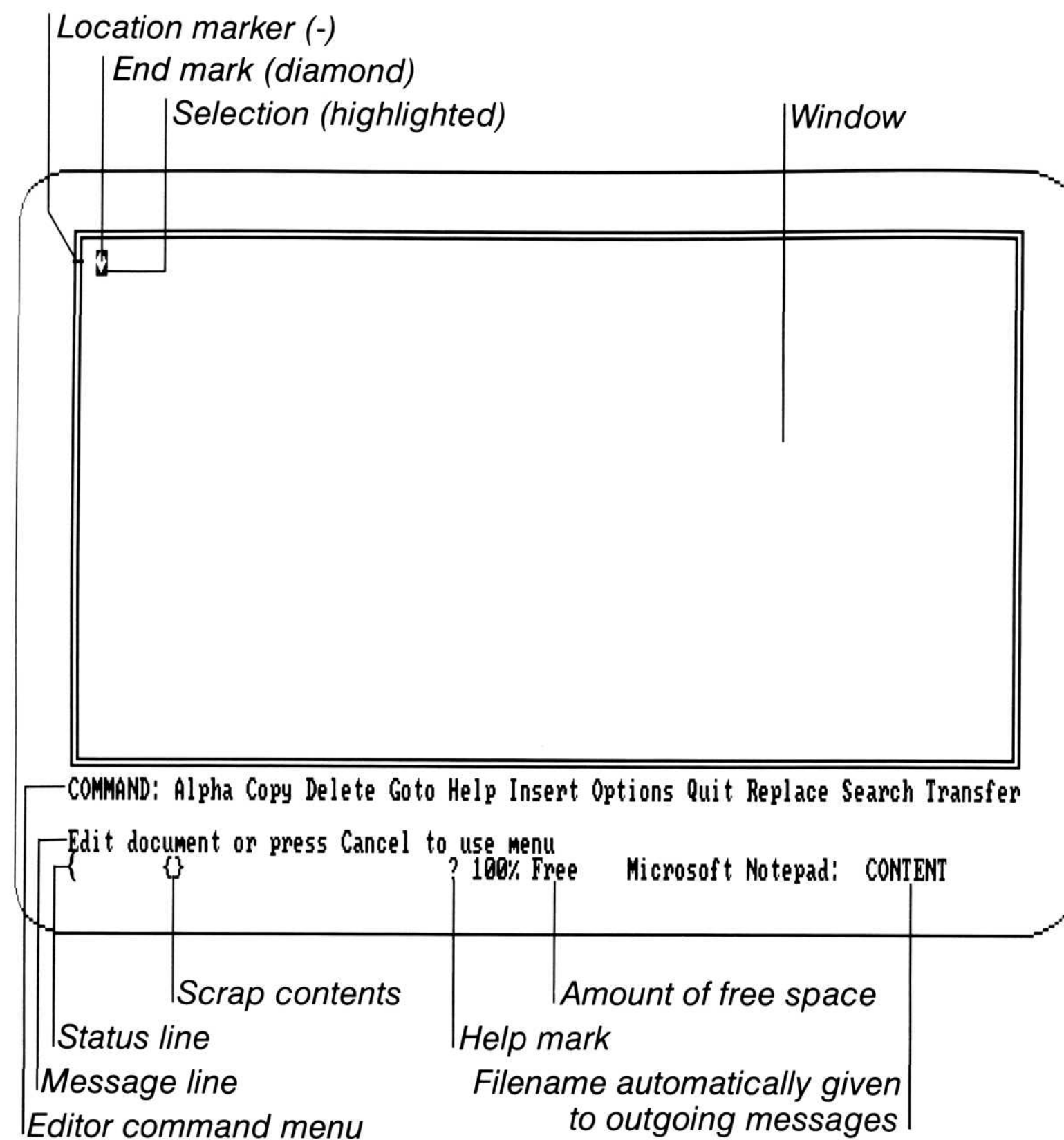
The Create Draft command fields appear on your screen.

CREATE DRAFT
subject: **■**
content type: (Text)Form

- 4 If you want a subject line in your message, type a subject in the “subject” field.

- 5 If you want to create a letter rather than a form, accept the proposed response of "Text" in the "content type" field.
- 6 Press the ENTER key.

Mail displays the Editor screen and its main menu.



Typing Your Message

As soon as the Editor menu appears on your screen, you can begin typing your message. What you type will appear to the left of the diamond-shaped end mark in the upper left corner of the screen.

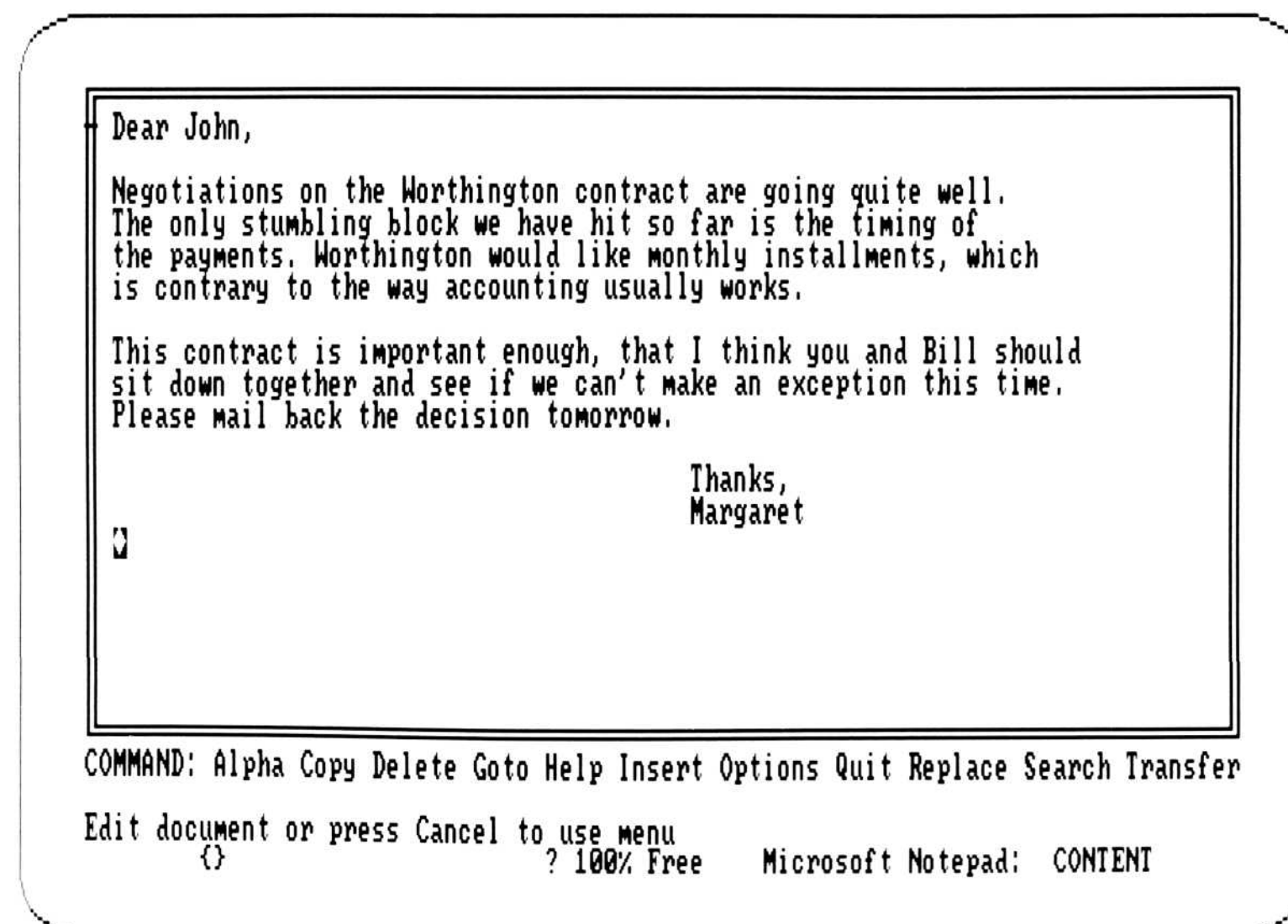
To type your message

- Start typing, pressing the ENTER key at the end of each line. If you make a mistake, use the BACKSPACE key to correct it.

When you press the ENTER key, the Editor inserts a carriage return. Unlike many word processors, the Editor requires a carriage return at the end of each line of your message, including the last line.

Note that *CONTENT* now appears in the status line. Mail gives your current message this filename, and it should not be changed.

The following screen shows a sample message:



Saving a Message

When your message is complete, you save it in the Desk. To save a message in the Desk:

- 1 Press the Esc key to activate the Editor menu.
- 2 Choose the Quit command to quit the Editor.

The message “Enter Y to save, N to lose edits, or Esc to cancel” appears.

- 3 Press Y to save your message in the Desk and return to the Compose menu.

The Desk screen displays the first seven lines of your message.

To save a message in the Desk

```
Microsoft Access Mail: Desk
Content Present, 0 Addresses Present
Addresses
```

```
Content
```

```
Dear John,
```

```
Negotiations on the Worthington contract are going quite well
The only stumbling block we have hit so far is the timing of
the payments. Worthington would like monthly installments, which
is contrary to the way accounting usually works.
```

Once a message is in the Desk, you can address it and stamp it, or go back later to edit it.

However, the Desk holds only one message at a time. If you want to write another message without deleting this one, you need to transfer it to the Folder or address it and move it to the Outbox with the Stamp command. See the Transfer Move Desk command in “Mail Commands.” See also the following sections on addressing and stamping.

Addressing a Message

If you want to send the message now in the Desk, you need to address it. The address includes the name of the mail vendor (MCI or EasyLink), the delivery service you choose (such as telex, paper mail, or electronic), and the recipient's address.

To address a message

To address a message:

- 1 Choose the Create Address command.

A list of delivery services appears on your screen.

```

1 - MCI - Electronic Mail
2 - MCI - Telex
3 - MCI - Paper Mail
4 - Western_Union - EasyLink
5 - Western_Union - Telex
6 - Western_Union - World Telex
7 - Western_Union - Infocom
8 - Western_Union - Mailgram
9 - Western_Union - Telegram
10 - Western_Union - Cablegram
11 - Western_Union - Letter Service
12 - Western_Union - E-COM
13 - Western_Union - Overseas

```

CREATE ADDRESS for: 1

Enter number or select from list
COMPOSE Scr

Access: OFFLINE L1W1

- 2 In the “for” field, enter the number of the service to which you subscribe.

- 3 Press the ENTER key.

Mail now displays the Create Address command fields for the service you chose. For example, the Create Address fields for MCI Electronic Mail look like this:

```

CREATE ADDRESS for MCI ELECTRONIC
address label: CC
address:
priority:(Normal)OverNight 4-Hour delivery notification:(Yes)No
paper delivery: Yes(No) format:(Memo)Letter Document
charge note:
form name: signature name:

```

Managing Your Correspondence

This section gives you instructions for some of the tasks you will perform most often while using Mail:

- Editing messages
- Using another editor
- Sending messages
- Receiving messages
- Reading messages
- Saving messages
- Printing messages
- Forwarding messages
- Transferring a file into a message
- Deleting messages
- Creating an Address Book

Editing Messages

You use the Compose Modify command to edit messages or addresses that you created or received previously. You can move a message to the Desk from any other location in your message center to edit it. However, you can edit only text files, not binary files.

See Chapter 19, “Using the Editor,” for more detailed information about the Editor. See “Using Another Editor,” below, if you want to use another word processing program with Mail.

To edit a draft

To edit the draft of the message now in the Desk:

- [1]** Choose Compose Modify Draft.
If you want to change the subject of the message, type a new subject in the “subject” field.
If you simply want to edit existing text, accept the current subject and content type.
- [2]** Press the ENTER key.

The window is now active and you are ready to make corrections.

To add text to a message:

- 1 Use the direction keys to scroll to the place where you want to add text.
- 2 Type in the additional text. It will appear to the left of the highlight.

To change text, you first need to *select* it. You select text by highlighting it on your screen. Using the keyboard, you can select any character or sequence of characters. These remain selected until you delete them, insert text, or make another selection.

To select a string of characters:

- 1 Use the direction keys to select the first character in the sequence.
- 2 Press the EXTEND key (F6).
- 3 Use the direction keys to select the last character in the sequence.
- 4 Press the EXTEND key to stop extending the selection.

Selected text looks like this:

Thanks for the update. Bill and I are meeting this
afternoon to discuss the installment issue. I'll
let you know what our recommendation is as soon
as possible.

By the way, I'll forward a copy of the 1961 contract,
in which this issue arises.

To add text

To select text

To delete text

To delete selected text:

- Press the DELETE key. The selected character(s) go to the *scrap*, a temporary storage area. When you quit the Editor or use the DELETE key again, everything in the scrap is deleted.

To move text

To move selected text:

- 1 Press the DELETE key to send the selected text to the scrap.
- 2 Use the direction keys to mark the place where you want to put the selected text.
- 3 Press the INSERT key to move the text in the scrap to the place you have marked. It will appear to the left of the highlight.

To quit the Editor

To quit the Editor:

- 1 Press Esc to activate the Editor menu.
- 2 Choose Quit.

The message “Enter Y to save, N to lose edits, or Esc to cancel” appears.

- 3 Press Y to save your edited message in the Desk.

You can also use the Compose Modify command to edit replies, addresses, and Address Books. See “Mail Commands” for details.

Using Another Editor

To use another editor

You can use another editor, such as a word processing program, for creating and editing your correspondence. To use another editor with Mail:

- 1 Choose the Modify Settings command from the main Custom Menu.
- 2 Type the full pathname of your editor file, including its extension, in the “mail editor filename” field. For example, *c:\msword\word.com*
- 3 Press the ENTER key.
- 4 Choose Compose Create or Compose Modify to create or edit a message.

Mail loads the editing program you specified.

- 5 Type your message as you normally would. Check your vendor’s subscription information for limitations on format. For example, boldface, italics, and underlining are not supported by the electronic mail services.

To save the message, you must print it to a file.

- 6 Print the message to a file using your editor's print command.
- 7 Quit your editor as you normally do.

Each editing program will have some specific requirements. For example, the following procedure applies specifically to using Microsoft Word with Mail.

If you use Microsoft Word to edit your messages, you will need to refer to the Word manual to copy the printer driver, PLAIN.PRD, into the \MSTOOLS directory so that you can print files using Word.

When PLAIN.PRD is in the \MSTOOLS directory on your hard disk:

- 1 Choose Print Options from the Word main menu.
- 2 Type *plain* in the "printer" field.
- 3 Press the ENTER key.

To install Word as your editor for Mail:

- 1 Choose the Modify Settings command from the main menu.
- 2 Type the full pathname of your editor file, including its extension, in the "mail editor filename" field. For example, *c:\msword\word.com*
- 3 Press the ENTER key.

Now, when you want to create a message:

- 1 Choose Compose Create or Compose Modify to create or edit a message.

Mail loads Word. The message "Enter Y to create file" appears.

- 2 Press Y.
- 3 Type in your message as you normally would.

To save the message, you must print it to a file.

- 4 Choose Print File.
- 5 In the "filename" field, type the full pathname of your message, consisting of the drive the Mail program disk is in, followed by a backslash and the current message center name, then *\desk\content*. Include the period after "content." For example, *b:\jack\desk\content*.

To install the Microsoft Word printer driver

To install Word

To use Word

- 6 Press the ENTER key.
- 7 Quit Word. The message “Enter Y to save, N to lose edits, or Cancel” appears.
- 8 Since you have saved the message by printing it to a file, press N.

The Mail Compose menu reappears.

Sending Messages

To send a message

When you have messages in the Outbox, you can send just one of them, several, or only those destined for a specific service.

- 1 Choose the Send command.
- 2 Choose Message.

Mail displays a list of the messages in the Outbox, and prompts you for a message number.

- 3 Type a message number, series, or range of numbers, separated by commas—for example, *1, 3, 5-10*; or choose from the list by pressing any direction key. Or, you can type *all* to send all the messages.
- 4 In the “on comm line” field, type the number of the communications line your modem is on, if the default is incorrect.
- 5 Press the ENTER key.

When you carry out the Send command, Mail takes the following actions:

- Reads the Access Phonebook for the connection information for the vendor you’re using.
- Connects you and logs you in to the vendor’s computer. You’re on line in a few seconds.
- Sends your message(s) through a delivery service of your vendor.
- Asks if you want to receive any messages in your electronic mailbox, and retrieves your mail if you press Y.
- Logs you off and disconnects you.

If you used the Send Message command and have messages for another vendor, Mail repeats this procedure.

Receiving Messages

When you start Mail, you may want to retrieve the new messages waiting for you in your vendor mailbox.

- 1 Choose Receive.

Mail displays a list of the vendors.

- 2 In the “from” field, enter the name of the vendor you want, or choose from the list by pressing any direction key. Type the name of the vendor you want. You can type *all* to receive the messages from all your vendors.

Mail logs you in to the vendor and displays a list of the messages in your vendor mailbox.

- 3 Type a message number, series, or range; or choose from the list by pressing any direction key.

Note You cannot specify individual messages to receive from MCI Mail; this service sends all your messages to you automatically.

- 4 Press the ENTER key to receive the messages you specified.

Mail places your messages in your Inbox.

Once your Inbox receives the message(s), Mail asks if you want to send the message(s) in your Outbox (if there are any).

- 5 Press Y to send your messages, or N to return to the main Custom Menu.

Reading Messages

To read the new messages in your Inbox:

- 1 Choose the View command.

- 2 Choose Inbox.

Mail lists the messages in your Inbox.

- 3 In the “message #” field, type a message number, series, or range; or choose from the list by pressing any direction key. Or, you can type *all* to read all messages.
- 4 Press the ENTER key.

To receive a message

To read a message

If your message fills more than one display window, Mail asks you to press Y to show the next screen, or N to return to the main Mail menu.

You also can use the View command to read messages in the Outbox, Desk, and Folder.

Saving Messages

You can save Mail messages to permanent files.

To save a message

To save a message from your Inbox to a file:

- ❶ Choose the Transfer Export command.
- ❷ Choose Inbox.
Mail displays a list of messages in the Inbox.
- ❸ In the “message #” field, type a message number or choose from the list by pressing any direction key.
- ❹ In the “content only” field, choose “Yes” to transfer only the message content, without its address(es). Choose “No” to transfer the message with its associated address(es).
- ❺ In the “to filename” field, type the full pathname of the file you want to transfer the message to.
- ❻ Press the ENTER key.

Printing Messages

You can use the Print command to print the message in the Desk or any messages in the Inbox, Outbox, or Folder.

To print a message

To print a message in the Folder:

- ❶ Choose the Print Folder command.
Mail displays a list of messages in the Folder.
- ❷ In the “message #” field, type a message number, series, or range; or choose from the list by pressing any direction key. Or, type *all* to print all the messages in the Folder.

Forwarding Messages

To forward a message in your Inbox to someone else, you move it to the Desk.

- 1 Choose Transfer Move.
- 2 Choose Inbox.
- 3 In the “to” field, choose “Desk”.
- 4 In the “message” field, type a message number, or choose from the list by pressing any direction key.

Once the message is in the Desk, you can edit, address, stamp, and send it.

To forward a message

Transferring a File into a Message

If you want to send a text file by electronic mail, you can put a copy of it in the Desk, then address and send it.

You can send text files using any of the vendors.

To transfer a file to the Desk:

- 1 Choose Transfer Import.
- 2 In the “from filename” field, enter the name of the file, using its complete pathname.
- 3 Press the ENTER key.

The file goes to the Desk and becomes a message with the filename “CONTENT.” You can edit or add to a text file.

To transfer a file to the Desk

Note If you want to send a Microsoft Word file as text, be sure that you have saved it using the Word printer driver, PLAIN.PRD, which ensures that the lines of the file are properly formatted with carriage returns within the eighty-column screen. See the Microsoft Word manual for more information.

Deleting Messages

You use the Transfer Delete command to delete messages from the Inbox, Outbox, and Folder. You can use either Transfer Delete or Compose Delete to delete the message in the Desk. However, it is unnecessary to do so, because when you compose a new message it automatically overwrites the old one.

To delete a message

To delete a message in the Outbox:

- 1 Choose Transfer.
- 2 Choose Delete.
- 3 Choose Outbox.

The screen displays a list of the messages in the Outbox. Use the direction keys to select the message you want to delete — in this case, there is only one, so it is already selected.

- 4 Press the ENTER key.

The message “Enter Y to delete from Outbox, or N to cancel” appears.

- 5 Press Y.

Mail deletes the message in the Outbox.

Creating an Address Book

Each mail vendor assigns a unique electronic mail address to each subscriber, in its own special format. You can store this information in an Address Book, which is a file you set up in your message center; then you can select the addresses you want from it to address your mail quickly and accurately.

To create an Address Book

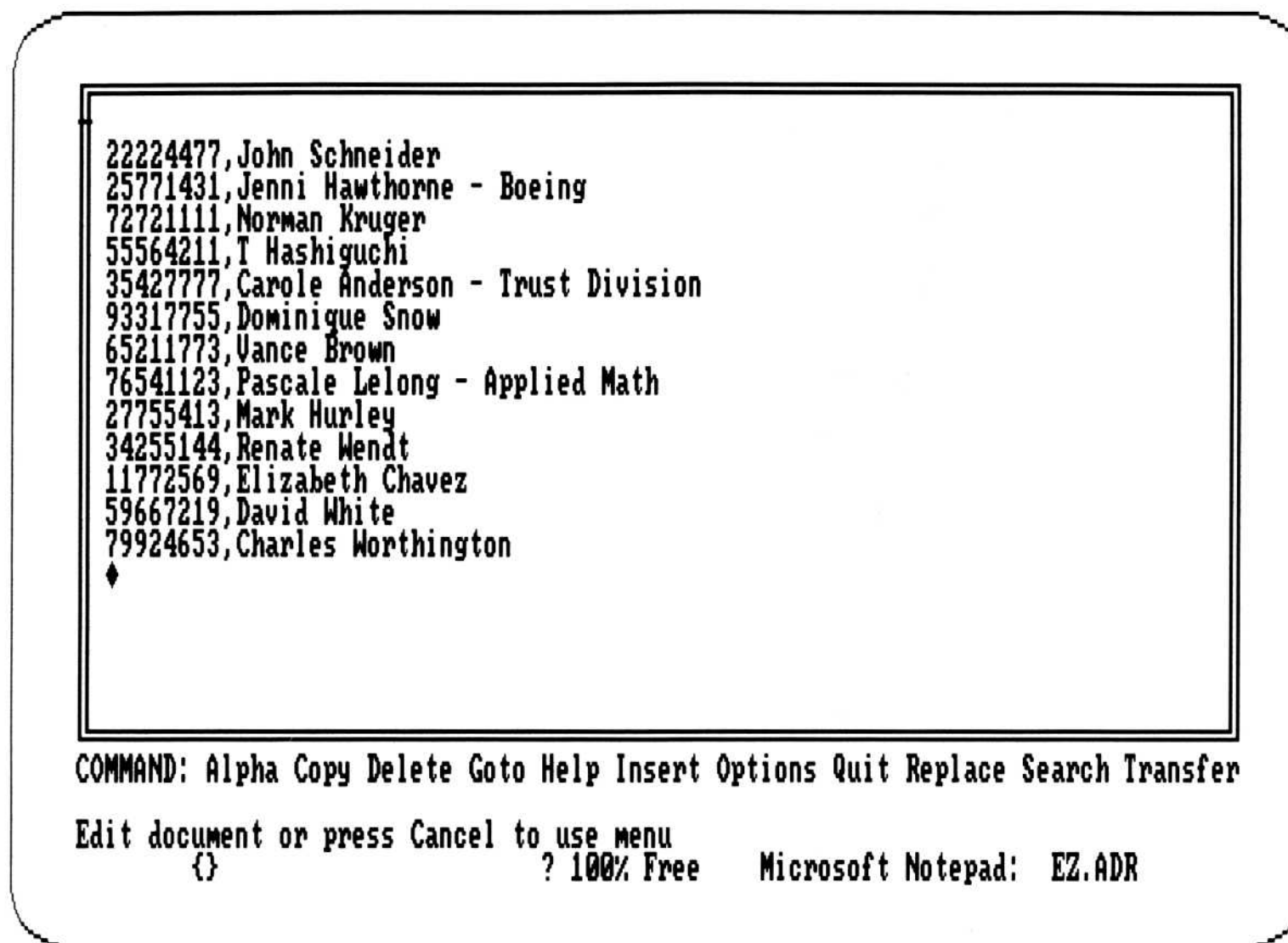
First, prepare the list of electronic addresses you want to put into an Address Book. For instructions on creating unique electronic addresses in the proper format and including all the necessary information, refer to your vendor’s user’s guide. For example, *jsmith boeing* is more likely to be unique than *jsmith*.

- 1 Choose Compose Create List.
- 2 Type the recipient’s unique electronic address, followed by a comma.
- 3 Type the recipient’s name, followed by a carriage return. (Only eighty characters will be displayed on the line; check subscription information for length limitations.)

Be sure to use the carriage return at the end of the last address you type.

- 4 Press Esc to activate the Editor menu.
- 5 Quit the Editor; or, if you are using another editor, print your message to a file.

Here is an example of an Address Book:



To use an Address Book to address messages, see the Compose Address command in “Mail Commands.”

To modify an Address Book, see the Compose Modify List command in “Mail Commands.”

Mail Commands

This section provides definitions for the Mail Custom Menu commands and describes how to use them.

COMMAND: **Compose** Help Modify Print Quit
Receive Send Transfer View

Note that pressing Esc in command fields or any menu cancels the command and returns you to the previous menu.

Many of the Mail command fields require reference to your vendor's user information.

Compose

Compose

COMMAND: **Create** Modify Delete Stamp Exit

Provides the menus for creating, deleting, modifying, and stamping messages.

When you choose Compose, the Compose menu replaces the Mail main Custom Menu. To return to the main Custom Menu, choose Exit.

Compose Create

Compose Create

CREATE: **Create** Reply Address List

Provides menus for creating, editing, addressing, and replying to messages, and for creating lists for your service-specific Address Books.

Note Use the Compose Create commands only to create new text. To edit existing text, use the Compose Modify commands. If you try to use a Create command to modify a draft, reply, or Address Book, Mail asks if it should delete the existing text.

Compose Create Address

Compose Create Address

- 1 - MCI - Electronic Mail
- 2 - MCI - Telex
- 3 - MCI - Paper Mail
- 4 - Western_Union - EasyLink
- 5 - Western_Union - Telex
- 6 - Western_Union - World Telex
- 7 - Western_Union - Infocomm
- 8 - Western_Union - Mailgram
- 9 - Western_Union - Telegram
- 10 - Western_Union - Cablegram
- 11 - Western_Union - Letter Service
- 12 - Western_Union - E-COM
- 13 - Western_Union - Overseas

CREATE ADDRESS for:

Creates addresses for the delivery services shown above.

Command Field

for Type the number of a delivery service or choose from the list by pressing any direction key. If you are using an electronic delivery service, you and the recipient must subscribe to that vendor.

See the entries below for further information about addresses for each delivery option.

Compose Create Address MCI

Compose Create Address MCI

One of the following sets of command fields appears on your screen, depending on which service you chose:


```

CREATE ADDRESS for MCI ELECTRONIC
address label: ☐ CC
address:
priority:(Normal)OverNight 4-Hour    delivery notification:(Yes)No
paper delivery: Yes(No)              format:(Memo)Letter Document
charge note:
form name:                          signature name:

```

```

CREATE ADDRESS for MCI TELEX
address label: ☐ CC
address:
attention:
priority:(Normal)OverNight 4-Hour    delivery notification:(Yes)No
charge note:

```

```

CREATE ADDRESS for MCI PAPER
address label: ☐ CC
name:
company:
street:
city:                                state:    zip:
priority:(Normal)OverNight 4-Hour    delivery notification:(Yes)No
format:(Memo)Letter Document
charge note:
form name:                          signature name:

```

Command Fields

address Type the electronic mailing address of the recipient or choose from the Address Book, if you have prepared one, by pressing any direction key.

If you have an MCI mailing list and want to send a message to each individual on it, type the name of the mailing list in this field.

address label Choose an option.

Choose “To” to send a message directly to someone. When you stamp a message that has MCI addresses, at least one address must have a “To” address label.

Choose “CC” to send a courtesy copy of a message to yourself or someone else.

attention If you want your message to be seen by a specific person, type a name in this field.

charge note Type the name of the party responsible for the message charge, if necessary.

delivery notification Choose “Yes” if you want MCI to notify you when your recipient has received his mail.

format Choose an option. See your MCI user information for details about the format options.

form name Type the name of a registered form, if necessary.

paper delivery Choose "Yes" to send your message to the registered postal address of the recipient.

priority Choose an option. See your MCI user information for details about the priority options.

signature name Type the signature name you have registered with the service.

When you carry out the Create Address command, Mail asks if you want to create another address for the chosen service. If you press Y, Mail removes the current address information so that you can supply new responses in the command fields. If you press N, Mail returns you to the Compose menu, where you can address and stamp the message for other services.

Compose Create Address Western Union

One of the following sets of command fields appears on your screen, depending on which delivery service you chose:

```
CREATE ADDRESS for WESTERN UNION EASYLINK
address: █
attention:
priority:(Yes)No          delivery notification:(Yes)No
```

```
CREATE ADDRESS for WESTERN UNION TELEX
address: █
attention:
priority:(Yes)No          delivery notification:(Yes)No
```

```
CREATE ADDRESS for WESTERN UNION WORLDTELEX
address: █
attention:
priority:(Yes)No          delivery notification:(Yes)No
```

```
CREATE ADDRESS for WESTERN UNION INFOCOM
address: █
attention:
```

Compose Create Address Western Union


```

CREATE ADDRESS for WESTERN UNION MAILGRAM
name: ■
street:
city:                                state:    zip:
attention:

```

```

CREATE ADDRESS for WESTERN UNION TELEGRAM
name: ■
street:
city:                                state:    zip:
attention:

```

```

CREATE ADDRESS for WESTERN UNION CABLEGRAM
name: ■
street:
city:                                country:
attention:

```

```

CREATE ADDRESS for WESTERN UNION LETTERSERVICE
name: ■
street:
city:                                state:    zip:

```

```

CREATE ADDRESS for WESTERN UNION E-COM
name: ■
street:
city:                                state:    zip:

```

```

CREATE ADDRESS for WESTERN UNION OVERSEAS
name: ■
street:
city:                                country:

```

Command Fields

address Type the electronic mailing address of the recipient or choose from the Address Book, if you have prepared one, by pressing any direction key.

If you have a Western Union mailing list and you want to send a message to each individual on it, type the name of the mailing list in this field.

attention If you want your message to be seen by a specific person, type the individual's name in this field.

delivery notification Choose "Yes" if you want Western Union to notify you when your recipient has received his mail.

priority Choose “Yes” to send messages with a priority. See your Western Union user information for details about the priority option.

When you carry out the Create Address command, Mail asks if you want to create another address for the chosen service. If you press Y, Mail removes the current address information so that you can supply new responses in the command fields. If you press N, Mail returns you to the Compose menu, where you can address and stamp the message for other services.

Compose Create Draft

Compose Create Draft

```
CREATE DRAFT
subject: 
content type:(Text)Form
```

Starts the Editor (or a text editing program you specified with the Modify Settings command) for composing new messages.

Command Fields

subject Type a brief subject name if you want the subject line to appear in your message. If not, you can leave this field blank.

content type Choose “Text” to draft a message that has a letter format. “Form” is reserved for a future version of Access.

After you press the ENTER key, your editor appears and you can begin typing a message.

See “Using Mail” in this chapter, and Chapter 19, “Using the Editor,” for more information.

Note You can have only one message in the Desk at a time. If there is a message in the Desk when you press the ENTER key, Mail asks if it should delete the content of the current message or cancel the command and return to the main Compose menu. See the Transfer Move command in this section for information on saving the current Desk message in the Folder.

Compose Create List

Compose Create List

```
1 - MCI - Electronic Mail
2 - Western_Union - EasyLink
3 - MCI and Western_Union - Telex
4 - Western_Union - World Telex
5 - Western_Union - Infocom
```

CREATE LIST for: 1

Starts the Editor (or a text editing program you specified with the Modify Settings command) to create an Address Book for electronic delivery services.

Command Field

for Type a number or choose from the list by pressing any direction key.

When you press the ENTER key, your editor appears and you can begin typing the Address Book.

For this service:	Type this:
MCI Electronic	MCI ID# or your user name with any appropriate MCI addressing hints for assuring uniqueness
Western Union EasyLink	EasyLink Mailbox address
Western Union InfoCom	InfoCom address
Telex	Telex number, followed by your Answerback in parentheses

- ❶ Type the recipient's unique electronic address, followed by a comma.
- ❷ Type the recipient's name, followed by a carriage return. The Address Book will display up to 80 characters of the name. Be sure to use the carriage return at the end of the last address you type.
- ❸ When you have typed in all the addresses, press Esc.
- ❹ Choose Quit from the Editor menu and respond with Y when Mail asks for confirmation.

See the Compose Create Address command in this section to use an Address Book to address a message.

See "Creating an Address Book" in "Using Mail" for an example of an Address Book.

Compose Create Reply

Compose Create Reply

CREATE REPLY to: 

Starts the Editor (or a text editing program you set up with the Modify Settings command) for composing replies to the messages you've received.

If you are replying to a form instead of text, a forms processor comes up instead of the Editor. Follow the instructions on your screen for filling in the form.

Command Field

to Type the number of the message you want to reply to, or choose from the list of messages by pressing any direction key, then press the ENTER key. See also the Compose Modify Reply command in this section.

Compose Delete

Compose Delete

DELETE:  Reply Address List

Deletes the message in the Desk, an Address Book, or a specific address.

Compose Delete Address

Compose Delete Address

DELETE ADDRESS #: █

Deletes an address assigned to the message in the Desk.
Mail displays a list of addresses.

Command Field

Type the number of the address you want to delete.

The message “Enter Y to confirm deletion, or N to return to Mail command line” appears.

Press Y or N.

If you want to delete an address of a message in the Outbox, you must first use the Transfer Move command to move the message to the Desk.

Compose Delete Draft

Compose Delete Draft

Deletes the message in the Desk.

The message “Enter Y to confirm deletion, or N to return to Mail command line” appears.

Press Y or N.

Compose Delete List

Compose Delete List

DELETE LIST for: █

Deletes an Address Book you created for an electronic delivery service.

Mail displays a list of the Address Books you created.

Command Field

for Type the number of the service whose Address Book you want to delete. Mail asks you to confirm the deletion or cancel it by pressing Y or N.

Compose Delete Reply

Deletes the reply message in the Desk.

The message “Enter Y to confirm deletion, or N to return to Mail command line” appears.

Press Y or N.

Compose Delete Reply

Compose Exit

Returns you to the Mail main Custom Menu.

Compose Exit

Compose Modify

MODIFY: **Draft** Reply Address List

Starts the Editor (or a text editing program you set up with the Modify Settings command) for modifying drafts, replies, addresses, and Address Books.

Compose Modify

Compose Modify Address

Modifies the addresses associated with the message in the Desk.

Mail displays a list of your addresses.

Compose Modify Address

Command Field

Type the number of the address you want to change, or choose from the list by pressing any direction key. When you press the ENTER key, the Modify Address command fields for the recipient appear on the screen.

Type the correct information into the command fields and press the ENTER key to save the revised address.

**Compose Modify
Draft**

Compose Modify Draft

Starts the Editor (or a text editing program you specified with the Modify Settings command) so that you can edit the message in the Desk. If the message in the Desk is a form, use the Compose Modify Reply command.

When you choose Compose, the Desk screen appears, showing the first few lines of your message. When you choose Modify and then Draft, the Modify Draft command fields appear.

Command Fields

subject If you want to change the subject of the message, type a new subject name.

content type Choose “Text.” “Form” is reserved for a future version of Access.

Compose Modify List

Compose Modify List

Starts the Editor (or a text editing program you specified with the Modify Settings command) so that you can modify a mailing list.

Command Field

for Type the number of the service whose list you want to modify, or choose from the list of services by pressing any direction key.

**Compose Modify
Reply**

Compose Modify Reply

Starts the Editor (or a text editing program you specified with the Modify Settings command) so that you can modify the message in the Desk.

Command Fields

to Type the number of the message you want to reply to, or choose from the list of messages in the Inbox by pressing any direction key.

subject If you want to change the subject of this message, type a new subject name.

content type Choose "Text." "Form" is reserved for a future version of Access.

Compose Stamp

Copies the message, along with all its addresses, from the Desk to the Outbox. You cannot send a message without first stamping it. Once a message is in the Outbox, you can send it. An unaddressed copy of this message remains in the Desk so that you can edit it or give it additional addresses.

Note When you stamp a message which has MCI Mail addresses, at least one address must have a "To" address label. See the Compose Create Address command in this section for more information.

Help

HELP: ~~Resume~~ Next Previous
Commands Services

Provides information about the Mail Custom Menus.

Modify

MODIFY: ~~Settings~~ Profile

Modifies basic Mail settings, including message centers, the text editor, message-handling options, and login profiles for vendors.

Compose Stamp

Help

Modify

Modify Profile

Modify Profile

```
MODIFY PROFILE for: MCI
```

Modifies the login profile for a specific vendor in the message center you are currently using.

You need to modify the login profile if you have set up a new message center, and you want Mail to use a new user name and password for the vendor accounts associated with the new message center.

For example, if your first message center is named *virginia* and you have used the Modify Settings command to create a new message center named *harold*, you probably want to use Harold's user name and password for Harold's correspondence. However, Mail will use the ones you originally provided when you installed Mail until you provide new ones with the Modify Profile command. The original login profile remains associated with the original message center.

Be sure that you are in the message center for which you want to provide a new login profile when you choose the Modify Profile command.

Command Field

for Type the name of the vendor whose login profile you want to modify, or choose from the list by pressing any direction key.

Modify Profile MCI

Modify Profile MCI

```
MODIFY PROFILE for MCI
user name:      password:
```

Provides a new user name and password for the MCI Mail account that you will use with the current message center.

Command Fields

user name Type your MCI Mail user name.

password Type your MCI Mail password. If you want the vendor to ask for your password when Mail logs you in, you can leave this field blank.

Modify Profile Western Union

Modify Profile Western Union

```
MODIFY PROFILE for WESTERN_UNION
easylink id: █ user name: password:
```

Provides a new user name and password for the Western Union account that you will use with the current message center.

Command Fields

easylink id Type your Western Union EasyLink identification.

user name Type your Western Union user name.

password Type your Western Union EasyLink password. If you want the vendor to ask for your password when Mail logs you in, you can leave this field blank.

Modify Settings

Modify Settings

```
MODIFY SETTINGS for message center: █
mail editor filename: NOTEPAD.COM
auto receive: Yes(No) auto send: Yes(No)
priority handling: Yes(No) delivery notification: Yes(No)
copy to folder: Yes(No) print/view display: Full(Brief)
mail services available: 1-13
```

Modifies basic Mail settings, including message centers.

You use the Modify Settings command to create new message centers or to switch from one message center to another. With this command, you can also instruct Mail to use another text editing program. You can modify Mail options, including automatic prompts to send or receive messages, priority handling, delivery notification, automatic copies, and whether or not to see the full header information when you use the Print or View commands.

You create a new message center by typing a new name in the “for message center” field. Then you use the Modify Profile command to enter a new user name and password for the new message center. See the Modify Profile command in this section.

Command Fields

for message center If you want to set up a new message center, type a new message center name. If you want to switch to another message center, type an existing message center name. You can use the direction keys to select from a list of your current message centers.

mail editor filename Type the pathname of the editor you want Mail to use. The built-in Editor is the default, NOTEPAD.COM.

auto receive Choose “Yes” if you want Mail to display the list of messages in your service mailbox after you have sent the messages in your Outbox. Choose “No” if you want Mail to ask first if you want to receive messages, then display the list.

auto send Choose “Yes” if you want Mail to display the list of messages in the Outbox for sending after you have received your messages in the Inbox. Choose “No” if you want Mail to ask first if you want to send any messages, then display the list.

priority handling Choose “Yes” to set the default in the Compose Create Address “priority” fields to the highest available delivery priority. Choose “No” to set the default to regular delivery.

delivery notification Choose “Yes” to set the default in the Compose Create Address “delivery notification” fields to Yes.

copy to folder Choose “Yes” to make a copy for the Folder of each message you send to the Outbox.

print/view display Choose an option.

Choose “Full” to see the message and all its header information, including addresses, when you print or view your messages.

Choose “Brief” to see the message and only its basic header information (i.e., “To,” “date,” and “subject”) when you print or view your messages.

mail services available Press any direction key to view the list of services. If you do not subscribe to all of them, type only the numbers of the ones to which you subscribe. Then the list of services Mail displays for you whenever you address, send, or receive messages will include only the services you use. Type a number, series, or range of numbers separated by commas — for example, *1,3,5-10*

Print

PRINT: **Inbox** Outbox Desk Folder

Prints a message in the Desk, Inbox, Outbox, or Folder.

Make sure your printer is plugged into your computer and turned on.

Print Desk

Prints the message in the Desk.

Print Folder

PRINT FOLDER message #: 1

Prints messages in the Folder.

Command Field

message # Type a message number, series, or range of numbers, separated by commas. For example, *1,3,5-10*. You can also type *all* or choose from the list by pressing any direction key.

Print Inbox

PRINT INBOX message #:

Prints messages in the Inbox.

Command Field

message # Type a message number, series, or range of numbers, separated by commas. For example, *1,3,5-10*. You can also type *all* or choose from the list by pressing any direction key.

Print

Print Desk

Print Folder

Print Inbox

Print Outbox

PRINT OUTBOX message #: █

Prints messages in the Outbox.

Command Field

message # Type a message number, series, or range of numbers, separated by commas. For example, *1,3,5-10*. You can also type *all* or choose from the list by pressing any direction key.

Quit

Quit

Stops Mail and returns you to the Access Session menu.

Mail asks you to confirm or cancel your decision by pressing Y or N.

Receive

Receive

RECEIVE from: on comm line: 1

Retrieves messages sent to you.

Command Fields

from Type the number of the vendor you want, type *all*, or choose from the list by pressing any direction key.

on comm line Type the number of the communications line you want your modem to use to receive messages, or accept the proposed response.

After you press the ENTER key, Mail automatically connects and logs you in to the vendor, and displays the messages in your vendor mailbox.

message # Type a message number, series, or range of numbers from the list, or type *all* to receive all messages. After you press the ENTER key, Mail retrieves your messages and puts them in the Inbox.

Once your Inbox receives the message(s), Mail asks if you want to send the message(s) in your Outbox. Press Y to send the messages, N to return to the main Custom Menu.

Send

```
SEND: Message Using
```

Sends your addressed and stamped message(s).

Send

Send Message

```
SEND MESSAGE #: ■          on comm line: 1
```

Sends addressed and stamped message(s) to the vendor indicated in the address.

Mail displays a list of the messages in the Outbox.

Send Message

Command Fields

Type a message number, series, or range of numbers from the Outbox list, or type *all*.

on comm line Type the number of the communications line you want your modem to use to send messages, or accept the proposed response.

After you press the ENTER key, Mail connects and logs you in to a vendor, and sends your message(s). Mail then asks if you want to receive your messages from that vendor mailbox. Press Y to receive your messages or N to return to the main menu. If you are sending messages for more than one vendor, Mail connects and sends messages to each, and asks if you want to receive messages from each.

Finally, Mail logs you off, disconnects, and returns you to the main Custom Menu.

Send Using

Send Using

```
MCI - Mail Services
Western_Union - Mail Services
```

```
SEND USING:                on comm line: 1
Enter text or select from list
MAIL                Scr                Access:                OFFLINE L1W1
```

Sends message(s) to a specific vendor. For example, if you specify MCI, Mail will dial up MCI and send only the messages in the Outbox addressed to MCI.

Command Fields

send using Type the name of the vendor whose messages you want to send, or use the direction keys to select from the list.

on comm line Type the number of the communications line you want your modem to use to send messages, or accept the proposed response.

After you press the ENTER key, Mail logs you in to the vendor(s) you chose and sends your message(s). It then asks if you want to receive messages from your vendor mailbox. Press Y or N. Finally, Mail logs you off, disconnects, and returns you to the main Custom Menu.

Transfer

Transfer

```
TRANSFER: [key] Move Delete Import Export
```

Moves messages between the Inbox, Outbox, Desk, Folder, and disk. Also deletes messages.

Transfer Copy

TRANSFER COPY: **Inbox** Outbox Desk Folder

Copies a message from the Inbox, Outbox, Desk, or Folder to the Desk or Folder.

Transfer Copy

Transfer Copy Desk

Copies the message in the Desk to the Folder.

Transfer Copy Desk

Transfer Copy Folder

TRANSFER COPY FOLDER message #: **1**

Copies a message in the Folder to the Desk.

Mail displays a list of messages in the Folder.

Transfer Copy Folder

Command Field

message # Type the number of the message you want copied to the Desk, or use the direction keys to select from the Folder messages. Mail then copies the message you selected to the Desk.

Transfer Copy Inbox

TRANSFER COPY INBOX to: **Desk** Folder

Copies a message from the Inbox to the Desk or Folder. Choose “Desk” to copy a message to the Desk. Choose “Folder” to copy a message to the Folder.

After you choose “Desk” or “Folder,” Mail displays a list of messages in the Inbox, and the “message #” command field appears.

Transfer Copy Inbox

Command Field

message # Type the number of the message you want to copy, or use the direction keys to select from the list. After you press the ENTER key, Mail copies your message to the Desk or Folder. A copy of the message remains in your Inbox.

Transfer Copy Outbox

Transfer Copy Outbox

TRANSFER COPY OUTBOX to: **Desk** Folder

Copies a message from the Outbox to the Desk or Folder. Choose “Desk” to copy the message to the Desk. Choose “Folder” to copy the message to the Folder.

After you choose “Desk” or “Folder,” Mail displays a list of messages in the Inbox, and the “message #” command field appears.

Command Field

message # Type the number of the message you want to copy, or use the direction keys to select from the list. After you press the ENTER key, Mail copies your message to the Desk or Folder. A copy of the message remains in your Outbox.

See the Modify Settings command in this section to automatically copy a message to the Folder when you stamp it.

Transfer Delete

Transfer Delete

TRANSFER DELETE: **Inbox** Outbox Desk Folder

Deletes a message, along with all its addresses, in the Inbox, Outbox, Desk, or Folder.

When you choose “Inbox,” “Outbox,” or “Folder,” Mail displays a list of messages and the “message #” field appears. If you choose Desk, a message appears that asks you to confirm or cancel the deletion by pressing Y or N.

Command Field

message # If you choose “Inbox,” “Outbox,” or “Folder,” type a number, series, or range of numbers of messages you want to delete. When you press the ENTER key, Mail asks you to confirm or cancel the decision by pressing Y or N.

Note If you want to delete certain addresses, but not the message, see the Compose Delete Address command in this section.

Transfer Export

Transfer Export

```
TRANSFER EXPORT: Inbox Outbox Desk Folder
```

Transfers a message from the Inbox, Outbox, Desk, or Folder to a file on disk.

Transfer Export Desk

Transfer Export Desk

```
TRANSFER EXPORT DESK to filename: █
content only:(Yes)No
```

Transfers a message from the Desk to a file.

Command Field

to filename Type the name of the file you want to transfer the message to, using the complete pathname. Do not use any filename, directory, or pathname associated with Mail.

content only Choose “Yes” to transfer only the message content, without its address. Choose “No” to transfer the message with its associated address(es).

Transfer Export Folder

Transfer Export Folder

```
TRANSFER EXPORT FOLDER message #: █ content only:(Yes)No
to filename:
```

Transfers a message from the Folder to a file. Mail displays a list of messages in the Folder.

Command Fields

message # Type a message number, series, or range of numbers, or choose from the list by pressing any direction key.

content only Choose “Yes” to transfer only the message content, without its address. Choose “No” to transfer the message with its associated address(es).

to filename Type the name of the file you want to transfer the message to, using the complete pathname. Do not use any filename, directory, or pathname associated with Mail.

Transfer Export Inbox

Transfer Export Inbox

```
TRANSFER EXPORT INBOX message #: █ content only:(Yes)No
to filename:
```

Transfers a message from the Inbox to a file. Mail displays a list of messages in the Inbox.

Command Fields

message # Type a message number, series, or range of numbers, or choose from the list by pressing any direction key.

content only Choose “Yes” to transfer only the message content, without its address. Choose “No” to transfer the message with its associated address(es).

to filename Type the name of the file you want to transfer the message to, using the complete pathname. Do not use any filename, directory, or pathname associated with Mail.

Transfer Export Outbox

Transfer Export Outbox

```
TRANSFER EXPORT OUTBOX message #: █      content only:(Yes)No
to filename:
```

Transfers a message from the Outbox to a file on disk. Mail displays a list of messages in the Outbox.

Command Fields

message # Type a message number, series, or range of numbers, or choose from the list by pressing any direction key.

content only Choose “Yes” to transfer only the message content, without its address. Choose “No” to transfer the message with its associated address(es).

to filename Type the name of the file you want to transfer the message to, using the complete pathname. Do not use any filename, directory, or pathname associated with Mail.

Transfer Import

Transfer Import

```
TRANSFER IMPORT from filename: █
subject:
content type:(Text)Form Binary
```

Retrieves a file and places it in the Desk.

Command Fields

from filename Type the name of the file that you want to transfer to the Desk. Then choose the content type “Text,” which refers to a message with a letter format. “Form” and “Binary” are reserved for a future version of Access.

subject Type a brief subject for the message if you want it to appear on the message.

Transfer Move

TRANSFER MOVE: **Inbox** Outbox Desk Folder

Moves a message from the Inbox, Outbox, Desk, or Folder to the Desk or Folder. You use the Transfer Move commands in the same way you use the Transfer Copy commands. However, Move deletes the message from its original location and places it in the new location.

Transfer Move Desk

Moves the message from the Desk to the Folder.

Transfer Move Folder

TRANSFER MOVE FOLDER message #: **1**

Moves a message in the Folder to the Desk.

Command Field

message # Type the number of the message you want moved to the Desk, or use the direction keys to select from the Folder messages.

Mail then moves the message you selected to the Desk.

Transfer Move Inbox

TRANSFER MOVE INBOX to: **Desk** Folder

Moves a message from your Inbox to the Desk or Folder. Choose “Desk” to move the message to the Desk. Choose “Folder” to move the message to the Folder.

After you choose “Desk” or “Folder,” Mail displays a list of messages in the Inbox.

Command Field

message # Type the number of the message you want to move, or use the direction keys to select from the list. After you press the ENTER key, Mail moves your message to the Desk or Folder.

Transfer Move Outbox

Transfer Move Outbox

TRANSFER MOVE OUTBOX to: **Desk** Folder

Moves a message from your Outbox to the Desk or Folder. Choose “Desk” to move the message to the Desk. Choose “Folder” to move the message to the Folder.

After you choose “Desk” or “Folder,” Mail displays a list of messages in the Outbox.

Command Field

message # Type the number of the message you want to move, or use the direction keys to select from the list. After you press the ENTER key, Mail copies your message to the Desk or Folder.

View

View

VIEW: **Inbox** Outbox Desk Folder

Displays messages in the Inbox, Outbox, Desk, or Folder.

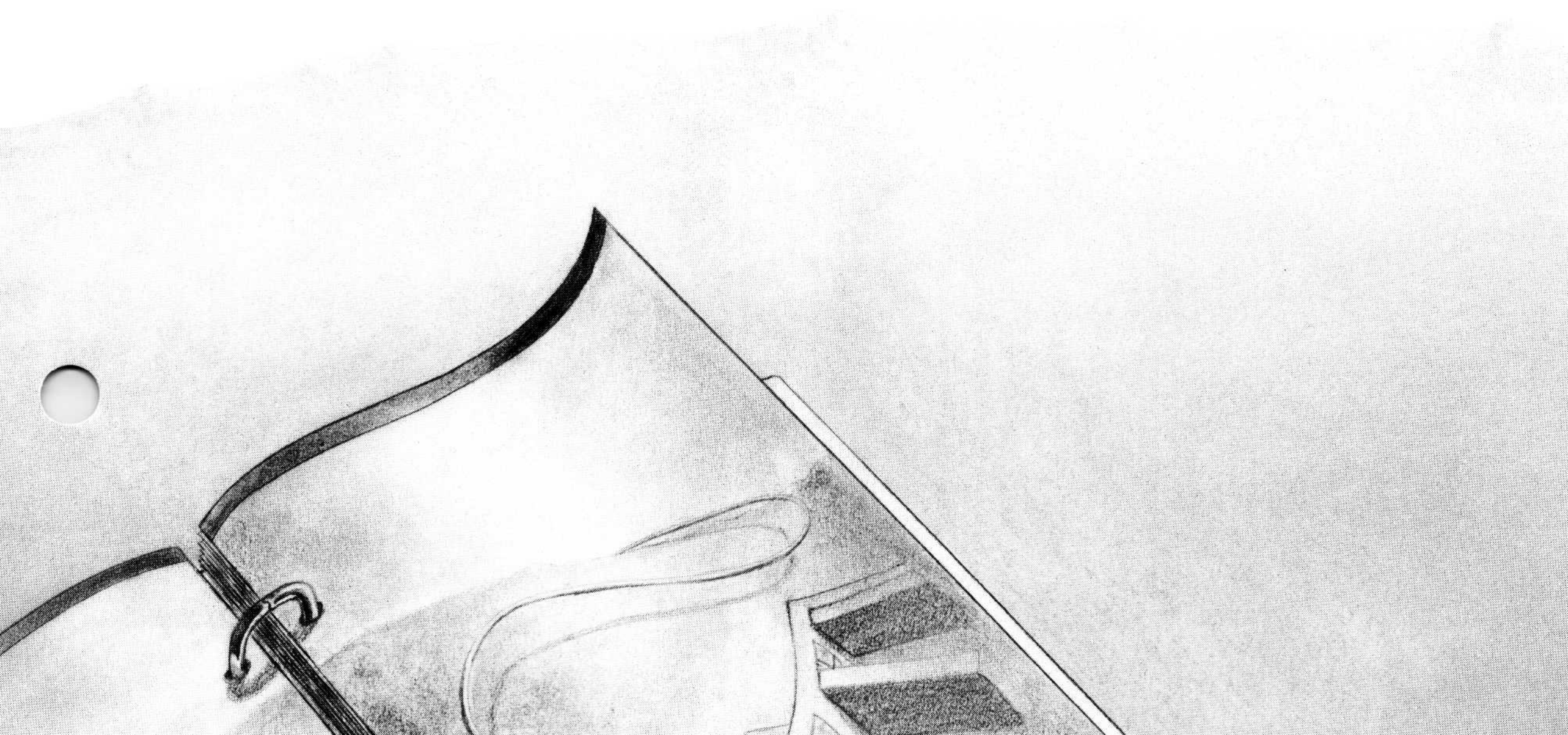
Command Field

message # When you choose “Inbox,” “Outbox,” or “Folder,” type the number of the message you want to read in the “message #” field, or use the direction keys to select from the list.

When you choose “Desk,” the message in the Desk, along with any addresses, appears on your screen.

Mail asks you to press Y to continue viewing, or N to return to the main Custom Menu.

Using Access



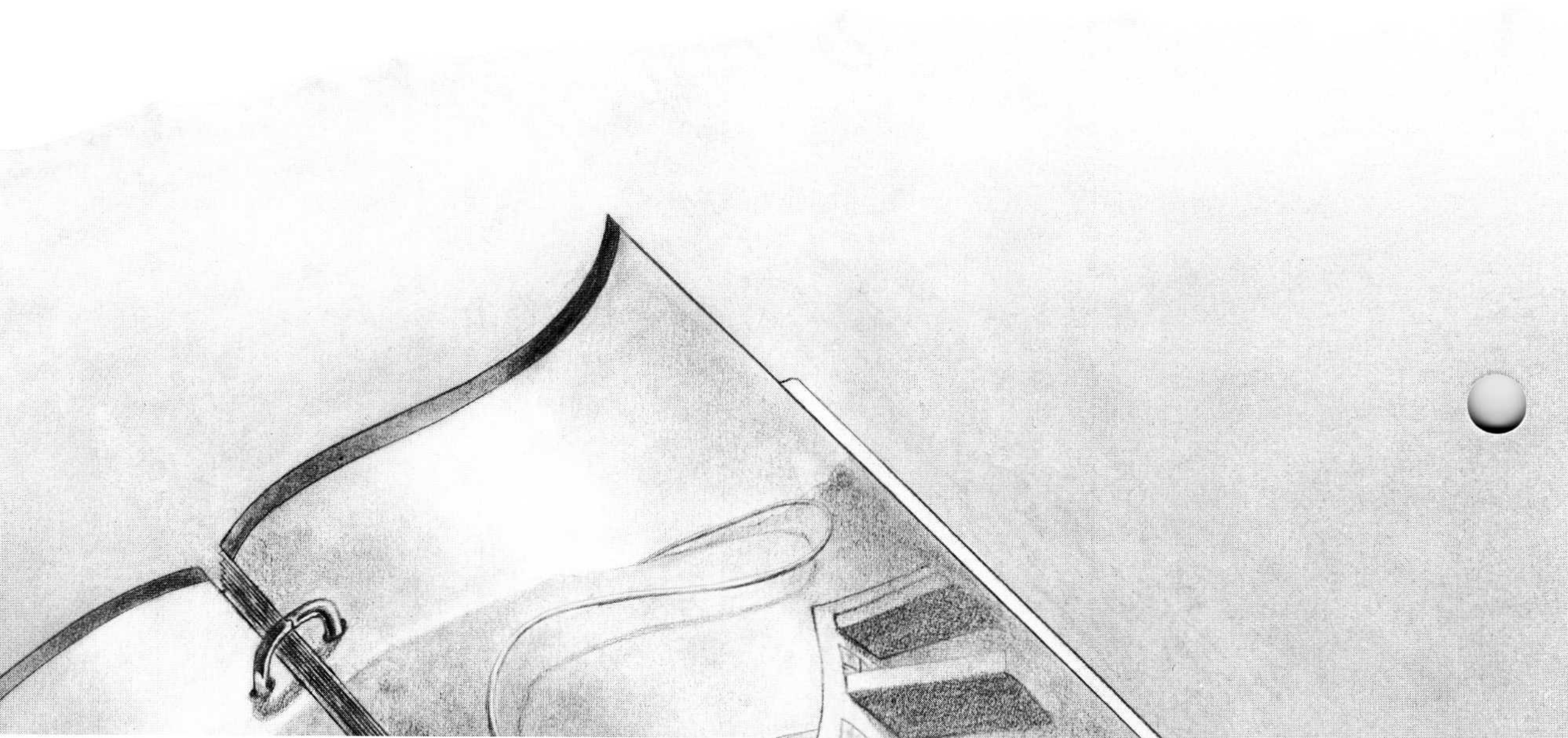
Using Access

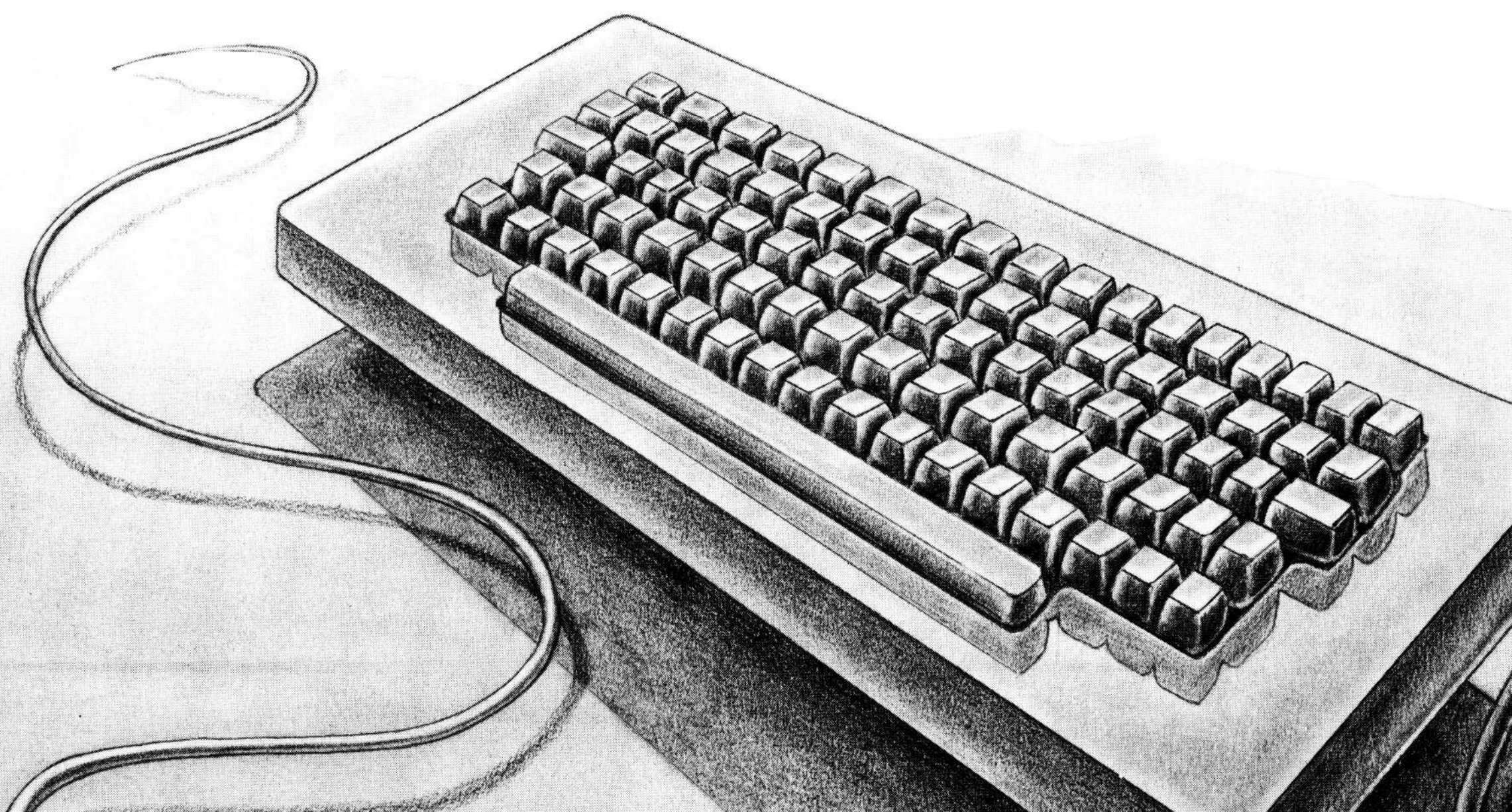
The eleven chapters of “Using Access” explain specific communications tasks, ranging from how to enter or change hardware and communications settings to adjusting your screen display or transferring files.

- Chapters 9 through 17 explain specific communications tasks, such as changing modem and communications settings, transferring files, automating a session, customizing your keyboard, and maintaining the Phonebook.

These chapters also tell how to communicate with several computers at one time, change the appearance of your screen, use remote control, and switch back and forth from data to voice communications.

- Chapter 18, “Writing Scripts,” provides a general overview of how to use the Microsoft Access Script Command (MASC) language to write your own scripts.
- Chapter 19, “Using the Editor,” tells how to use the Editor, a text editing program supplied with Access. This chapter also contains descriptions of Editor commands.





9 Changing Modem and Communications Settings

When you use the Install procedure, you enter modem and communications settings for connecting to another computer, called the host. Host communications settings are stored in your Phonebook. Later, you may want to add a host or change the settings for an existing host. An easy way to do this is to run the Install procedure and enter the information there. You can also use commands from the Session menu:

- Use the Options command to change your telephone line, modem, or printer settings.
- Use the Modify Settings command to change or add to communications settings.

Changing Modem Settings

When you change modem settings using the Options command, the new settings apply to the active communications line. If you have more than one communications line, first specify the communications line you want.

For example, if communications line 1 is active, and you want to specify line 2:

- 1 Choose the Goto command.
- 2 In the “comm line” field, type 2
- 3 Press the ENTER key.

The status line now shows *L2*, indicating line 2 is active.

Once you have identified the communications line, you can specify the modem settings.

The first time you use a particular phone or modem, you must give Access information about it. You specify settings for the first time, or change them, by filling in the first six fields of the Options command.

To change the communications line

Changing modem settings

To specify modem settings:

- 1 Choose the Options command.

```

OPTIONS phone: Tone Pulse      dial prefix:      modem name: MULTHC
      modem setup: ATZ1\      dial command: ATDT      dial postfix: \
      printer setup: LPT1:      mute: Yes(No)      control: (Local)Remote
      answerback:      login password:
Choose option
SESSION                        Access:      OFFLINE L1W1

```

- 2 In the “phone” field, choose “Tone” for a touch-tone telephone, “Pulse” for a rotary-dial telephone.
- 3 If you use a dial prefix for outside calls, enter the prefix in the “dial prefix” field. Otherwise, leave this field blank.

For example, if you are connected to a private branch exchange (PBX) system, and have to dial 9 for an outside call, you would type 9

Most telephone systems also need a pause after the dial prefix. Your modem may recognize a pause or delay character, such as a comma, which you include in this field.

- 4 In the “modem name” field, type the name of your modem, or press any direction key to display a list.

If your modem is not listed, select a modem that is compatible with yours. See your modem manual for details.

If you are using an acoustic coupler, choose “Acoustic.” If you are connected directly to a host computer (without a modem) choose “None.”

If your modem is not on the list and is not compatible with one that is listed, choose “Other.” When you choose a modem on the list, the appropriate settings automatically appear in the “modem setup,” “dial command,” and “dial postfix” fields.

If you choose “Other,” you will need to fill in these three fields. See your modem manual for the information you will need.

- 5 In the “modem setup” field, type the setup string for your modem.

Access sends this string of characters to your modem whenever you make or answer a call. The string initializes and resets your modem. For example, *AT21* instructs Access to send the string *AT2* and a carriage return, then to pause for one second.

- 6 In the “dial command” field, type the string of characters that instructs your modem to dial. For example, ATDT.
- 7 If your modem uses a postfix, type it in the “dial postfix” field. Otherwise, leave this field blank.
A common postfix is a carriage return, indicated by a bar (|).
- 8 Press the ENTER key.

Fill in the remaining fields only if you want to use remote control. For more information, see Chapter 16, “Answering Calls and Using Remote Control.”

For detailed information on pause characters and other modem settings, see Appendix B, “Modems and Hardware.”

For instructions on sending carriage return control characters and other nondisplayable characters, see Chapter 20, “Session Menu and Phonebook Commands.”

Changing Communications Settings

The communications settings you use must match those of your host. Access supplies communications settings that are appropriate for most hosts. However, some computers may have special requirements and you may need to change certain settings. To change communications settings, use the Modify Settings command. As with modem settings, the changes apply to the active communications line.

When you connect to a host listed in the Phonebook, Access uses the communications settings associated with the Phonebook entry for that host. Once you have connected to the host, these settings appear as responses in the Modify Settings command fields.

Access uses the host communications settings stored in the Phonebook as soon as you carry out the Connect command. To modify the settings *after* you connect, use Modify Settings from the Session menu. To modify the settings *before* you connect, use Modify Settings from the Phonebook menu. See Chapter 13, “Maintaining the Phonebook,” for details.

If you are connecting to a new host (one without a Phonebook entry), you can modify the settings either before or after you connect, using Modify Settings from the Session menu.

The first seven command fields in the Modify Settings command apply to settings that affect any communications session. Most of the remaining fields apply to settings that affect only file transfer.

Changing communications settings

If you are connecting to a mainframe or minicomputer, you should have the settings information they provide on hand.

If you are connecting to another microcomputer, you and the operator of the other microcomputer can decide on mutually appropriate settings.

To change communications settings:

- 1 Choose the Modify Settings command from the Session menu.

Usually you will be concerned only with the “speed” and “duplex” fields.

```

MODIFY SETTINGS speed: 300 duplex:(Full)Half Local
word length: 7(8) parity: Even Odd Mark Space(None)
stop bits:(1)2 terminal: VT100 VT52(TTY)Debug
XON/XOFF:(Yes)No
prompt character: end-of-line character:
prompt count: 0 prompt timeout: 0
expand tabs: Yes(No) pad blank lines: Yes(No)
filter input:(Yes)No add to input EOL:(None)CR LF
auto disconnect time: 0 remove output file linefeeds:(Yes)No

```

- 2 In the “speed” field, type a line speed or press any direction key to view a list.

A speed of 300 baud or 1200 baud is appropriate for most modems; 2400 baud is also common.

- 3 In the “duplex” field, choose a setting.

“Full” sends the characters you type to the host, which echoes them back to your screen so that you see what was received.

“Half” sends characters to the host and at the same time displays them on your screen.

“Local” displays characters on your screen but does not send them to the host.

- 4 In the “word length,” “parity,” and “stop bits” fields, the proposed responses are the most commonly used settings.

If your host has different requirements, change these responses.

- 5 In the “terminal” field, choose a terminal type.

The proposed response, “TTY,” is the most common.

- 6 In the “XON/XOFF” field, choose “Yes” if the host uses XON/XOFF flow control.

- 7 Press the ENTER key.

Most of the remaining fields in the Modify Settings command are for file transfer.

For more information, see Chapter 10, “Transferring Files.”

For more information on word length, parity, and stop bits settings, see the Modify Settings command in Chapter 20, “Session Menu and Phonebook Commands.”

In Access, you can use your microcomputer to emulate another type of terminal. This means your microcomputer can recognize control sequences that determine screen display associated with a particular terminal. You specify a terminal type according to what your host supports. Find out what terminal to emulate when you gather host information.

Access supports two commonly used intelligent terminal types: VT100 and VT52. You can also use your microcomputer as a standard teletype terminal (TTY), which recognizes only certain forms of controls, such as carriage returns and linefeeds, or as a debug terminal that displays all communications characters on the screen, including control sequences. Most information and mail services require only TTY terminal capabilities.

Access’ communications buffer has a limited capacity — approximately one screenful of data. Once the buffer fills up, it has no more room for incoming data, and the data can be lost. Some hosts support XON/XOFF flow control to regulate data transmission. If the host supports it, Access can use XON/XOFF to signal the host when to transmit and when to refrain, preventing data loss.

If you modify settings for a host, and then choose the Quit command, Access asks if it should update the Phonebook with the new information.

Press Y for Yes or N for No. If you press Y, Access will update the Phonebook entry, and use the new information the next time you connect to that host. See Chapter 13, “Maintaining the Phonebook,” for more information about the Phonebook.

Terminal emulation

XON/XOFF

Saving modified settings

10 Transferring Files

With Microsoft Access, you can send and receive files with or without XMODEM error-checking protocol, depending on whether your host supports XMODEM.

You can also use Access' Export utility to format your files to be readable by Microsoft Multiplan, Microsoft Chart, Lotus 1-2-3, or VisiCalc.

Access also supports the X.PC protocol, which you can use to transfer files. For details, see Appendix D, "Using X.PC Connections."

Transferring Files without Protocol

If your host does not support XMODEM error-checking protocol, you use Transfer Send to send files and Transfer Capture to receive files.

Sending a file is usually very straightforward. Should you encounter problems, however, you may need to change some of Access' file transfer settings, and will first need to answer the following questions about your host.

- *How do you set up your host to receive files?*

You can often set up a host to receive files by running an editor and setting it to input mode. In this mode, the host accepts characters as text instead of commands.

- *Does your host process data one line at a time? If so, what prompt and end-of-line characters does it recognize for pacing transmissions?*

When a host processes data one line at a time, it stores incoming characters in a communications buffer until it has received a line of data, then processes the entire line. It cannot receive additional characters until it has processed the previous line.

For hosts that process data one line at a time, you can set Access to recognize end-of-line and prompt characters that enable it to pace data flowing to and from the host computer. This reduces the risk of losing characters. When you use pacing, you specify an end-of-line character, such as a carriage return, to define the end of a line. After Access sends this character, it waits to receive a prompt character from the host before sending the next line.

Instead of a prompt character, you can enter a prompt count or prompt timeout. A prompt count tells Access it must receive a specific number of characters from the host computer before sending the next line. A prompt timeout tells Access to wait for a specific number of seconds before sending the next line.

If you enter only an end-of-line character, and set prompt fields to zero (0) or leave them blank, Access depends on you to pace transmissions manually by pressing the PAUSE ON/OFF key (F9).

■ *Does your host allow tab characters in text files?*

If the host doesn't allow tab characters, you can expand them to an equivalent number of spaces.

■ *Does your host interpret a carriage return on an empty line as the end of input?*

If the host interprets a carriage return on an empty line as the end of input, you can tell Access to insert a blank space before the carriage return, which will pad such lines.

■ *Does your host insert a linefeed upon receiving a carriage return?*

Most hosts automatically insert a linefeed upon receiving a carriage return. If they receive a file that has carriage returns *and* linefeeds, the file will be received double spaced.

With this information, you can enter the necessary settings in the Modify Settings command fields.

Entering File Transfer Settings

You enter file transfer settings by filling in the following fields of the Modify Settings command:

To enter file transfer settings

- 1 Choose the Modify Settings command.

```
MODIFY SETTINGS speed: 1200 duplex: (Full)Half Local
word length: 7(8) parity: Even Odd Mark Space(None)
stop bits: (1)2 terminal: VT100 VT52(TTY)Debug
XON/XOFF: Yes(No)
prompt character: end-of-line character:
prompt count: 0 prompt timeout: 0
expand tabs: Yes(No) pad blank lines: Yes(No)
filter input: (Yes)No add to input EOL: (None)CR LF
auto disconnect time: 0 remove output file linefeeds: (Yes)No
```

- 2 In the “prompt character” field, enter the prompt character.

Access waits to receive this character from the host before sending the next line of data.

- 3 In the “end-of-line character” field, enter the character the host recognizes as the end of a line.

To specify a carriage return, use the bar character (|). For information on specifying other nondisplayable characters, see the introduction to Chapter 20, “Session Menu and Phonebook Commands.”

- 4 In the “prompt count” field, enter the number of prompt characters Access should receive after sending an end-of-line character before it can continue transmitting.

If you type the letter *L* in this field, Access counts the number of characters it receives after sending the first line of data, and displays *WAIT* in the status line to indicate it is no longer transmitting. When the host prompt characters appear on the screen, press PAUSE ON/OFF (F9) to resume transmission. Access uses this count to pace subsequent transmissions.

- 5 In the “prompt timeout” field, type the maximum number of seconds Access should wait before continuing transmission.

If Access does not receive a prompt from the host within this time, it resumes transmission. When you use this setting in combination with a prompt character or a prompt count, it acts as a backup in case a prompt character is lost or a count is missed during transmission.

- 6 If you are sending a file to a host that does not allow tab characters in text files, choose “Yes” in the “expand tabs” field.

- 7 If you are sending to a host that interprets a carriage return on an empty line to mean the end of input, choose “Yes” in the “pad blank lines” field.
- 8 In the “remove output file linefeeds” field, choose “Yes” to remove linefeeds from data during sending. Choose “No” if the host needs the linefeed character.
- 9 Press the ENTER key.

Using the Transfer Send Command

To transfer a file

Once you know that you and the host are using the same communications settings and you have connected to the host as usual, use Transfer Send to send the file:

- 1 Choose the Transfer Send command from the Session menu.
- 2 Enter the name of your file in the “from filename” field, or choose from a list of files by pressing one of the direction keys.
- 3 Press the ENTER key.

Access sends your file to the host.

Note If the file you want to send is one you opened to capture information in a session, you must close the file before Access can send it.

Transferring Files with XMODEM Protocol

Computer protocols protect data communications against the effects of static and other line noise, helping to ensure accurate file transfer. Access provides XMODEM protocol for hosts that support XMODEM. XMODEM is used widely by public bulletin boards and other microcomputer communications programs.

To transfer files with XMODEM protocol, you only need to know how to set up your host to receive or send files using XMODEM.

If the host is running Access, set the host to receive files using the Transfer Protocol Receive command, or to send files using the Transfer Protocol Send command.

Sending with XMODEM

To transfer a file with XMODEM protocol:

- 1 Connect to the host as usual.
- 2 Make sure the host is set up to receive a file under XMODEM protocol.
- 3 Choose the Transfer Protocol Send command from the Session menu.
- 4 In the “from filename” field, type the name of the file, or choose from a list of files by pressing one of the direction keys.
- 5 Press the ENTER key.

Access begins transferring the file to the host, and displays information about the transfer in the message line.

Protocol used	Estimated time remaining	Transfer status	Name of file	Character count	Number of transmission retries
XMODEM: Time Left: 00:04:03		WAIT	MYFILE.DOC	Count: 0	Retries: 0

SEND indicates Access is sending; *RECV* indicates Access is receiving; *WAIT* indicates Access is waiting for the host to acknowledge receipt of data.

When Access has transferred the file, it displays a completion message and returns to the Session menu.

To cancel a file transfer at any time, press the Esc key.

To send a file with XMODEM

To receive a file with XMODEM

Receiving with XMODEM

The procedure for receiving files with XMODEM protocol is similar to that for sending files.

- ❶ Connect to the host as usual.
- ❷ Request that the host send the file under XMODEM.
- ❸ Choose the Transfer Protocol Receive command from the Session menu.
- ❹ In the “to filename” field, enter the filename under which you want Access to save the file.
- ❺ Press the ENTER key.

Access receives the file from the host, and displays information on the file transfer in the message line.

To cancel a file transfer at any time, press the Esc key.

Using the Export Utility

Many applications programs use different formats to store data. Access lets you convert columnar text files to formats used by several popular applications programs.

You can use the Export utility to convert a file (such as a stock price history) to a format readable by the following applications programs:

- Microsoft Multiplan
- Microsoft Chart
- Lotus 1-2-3
- VisiCalc (DIF)

Once the file has been converted, you can use it just as you use the files you create with the application.

Note If you want to convert information you capture in a session, open the file and capture just the information you want to convert, then close the file before running Export. For information about capturing information to a file, see Chapter 3, “Conducting Communications Sessions.”

To convert a file using Export:

- 1 Choose the Run Program command.
- 2 In the “name” field, type *export*, followed by the name of the file you want to convert. For example, *export budget*
If you don’t enter a filename, Export prompts you for one.
- 3 Press the ENTER key.
Export asks you for the “output file format” and lists the application programs from which you can choose.
- 4 Type the number of the application for which you want the file formatted.
- 5 Press the ENTER key.
The file appears on your screen with rulers above and below it, and Export prompts you for the column width.
- 6 To enter the column widths, type the character positions where you want the column to start, a colon (:), and then the character position where you want the column to end. Use a comma (,) to separate columns. For example,
15:30,31:45,46:60
If you chose Chart in Step 4, Export will prompt you for a header row and a data row.
- 7 Type the number of the line that contains headings of your columns of data, and the number of the first line of data.
- 8 Press the ENTER key.

Export formats the file into the columns you specified and returns you to the Session menu.

Note If you want to abort this procedure and return to the Session menu, press Ctrl-C.

You can also use the Export utility outside of Access, under IBM DOS.

- 1 At the DOS prompt (A>), type *export filename*
If you do not type a filename, you will be prompted for it.
- 2 Press the ENTER key.
Export prompts you for the remaining information it needs, then formats the file.

To use the Export utility in Access

To use the Export utility outside Access

If you wish, you can bypass the prompts and supply the information Export needs by including the following information after *export filename*:

<i>-f format</i>	Specifies the format of the output file for the application you want. <i>Format</i> can be <i>MP</i> , <i>MC</i> , <i>WKS</i> , or <i>DIF</i> , for Multiplan, Chart, 1-2-3, or VisiCalc, respectively.
<i>-c c1:c2,c3:c4...</i>	Specifies column widths. Here, <i>c1:c2</i> are the character positions where you want the column to begin and end. Use commas to separate column specifications.
<i>-r h d</i>	(Chart only.) <i>H</i> is the row number of the header row; <i>d</i> is the row number of the first data row.
<i>-o filename</i>	Specifies the name of the formatted output file.

You can include this information in any order after the input filename. If you omit any, Export will prompt you for what it lacks. For example, the following command line converts the input file MYINFO into a Multiplan spreadsheet called MYSHEET:

```
A>export myinfo -f mp -c 15:30,31:45,46:60 -o mysheet
```

Using the Export utility in scripts

You can also use the Export utility within a script by using the RUNPROG statement to “run” Export. You must include all the information needed to convert the file, since Export cannot prompt you for it from within the script. The same syntax rules apply as in DOS.

For information on scripts, see Chapter 18, “Writing Scripts.” For details on the RUNPROG statement, see Chapter 21, “Microsoft Access Script Commands.”

11 Automating Communications Sessions

Microsoft Access can “learn” login sequences or command procedures and automatically carry them out. Access already has Custom Menu commands in script files that facilitate communications with the major information and mail services. These scripts are fairly complex programs, written in the Microsoft Access Script Command (MASC) language. This language is discussed in detail in Chapter 18, “Writing Scripts.”

However, you do not have to know MASC to create script files for logging in or automating tasks. Instead, you can use the “learn login” field of the Connect command, and the Learn command.

Recording a Login Sequence

To tell Access to record a login sequence and then use it each time you want to log in to that host:

- 1 Choose the Connect command from the Session menu.
- 2 Choose the host you want from the Phonebook, or fill in the command fields with the correct information.
- 3 Choose “Yes” in the “learn login” field.
- 4 Carry out the Connect command.

You will see *Lrn* on the status line.

- 5 Type the login sequence for the host.

Access will record the sequence and store it in a script file with an .LGN extension.

When you are finished with the login sequence, you need to instruct Access to stop learning and close the script file.

- 6 Press the MENU key (F10) to return to the Session menu.
- 7 Choose the Learn command.

In the “action” field, choose the proposed response, “Close.”

- 8 Press the ENTER key.

Recording a login sequence

Access has now stored your login sequence in a script file and will use it every time you connect to this host. If you are using floppy disk drives, Access stores the login script file on the Access Program disk. If you are using a hard disk, Access stores the file in the directory containing ACCESS.COM.

Note Access also records your password in the script file. You may want to consider your security requirements before recording a login sequence.

Recording a procedure

Recording a Procedure

If you use some procedures frequently, you can tell Access to record them in a script file and then carry them out upon your command. For example, you might create a script file that would automatically connect to a host, request information, capture it to a file, and disconnect.

To record a procedure:

- 1 Choose the Learn command.
- 2 In the “filename” field, type a filename. You can include an extension if you wish.

Access will store the learned procedure under this filename. If you omit the extension, Access adds the extension .SCR.

In the “action” field, choose the proposed response, “Open,” since you want to open a file in which to store your script.

- 3 Press the ENTER key.

Access starts recording the commands or keystrokes that follow. The status line displays *Lrn* to indicate Access is learning.

Follow the usual steps to connect to the host, capture the information you want, log off, and disconnect. When you have carried out all the steps you want to record:

- 4 Choose the Learn command from the Session menu to close the script file.

Access stores this series of steps under the filename you specified when you chose the Learn command. You can look at the script file you created by using the Transfer View File command. When you want to carry out this procedure again, you can use the Run Script command to run the script file:

- ❶ Choose the Run Script command.
- ❷ In the “filename” field, enter the name of the script file, or choose from a list of files by pressing any direction key.
- ❸ Press the ENTER key.

Running a script file

Access performs the sequence of steps stored in this script file. The status line displays *Scr* to indicate that Access is running a script file.

You can also write your script files using the Microsoft Access Script Command (MASC) language. See Chapter 18, “Writing Scripts,” for more information about MASC.

You can modify the script files by using the Editor, a text editing program. For example, you could change a filename or the commands you give to your host. See Chapter 19, “Using the Editor,” for information on the Editor. However, if you need to make extensive changes, you should be familiar with the MASC language. Until you are familiar with MASC, it would probably be easier to record the procedure again using the Learn command.

12 Customizing Your Keyboard

With Access, you can record a series of keystrokes into a single Quickey. When you press this Quickey, Access will type the recorded keystrokes. Quickeys are a convenient shortcut for typing commands or text strings you use often.

Assigning Quickeys

As you use Access, you will discover many tasks you do frequently that can be shortened with Quickeys. For example, you might connect to a service regularly for information about weather forecasts. To get the forecast, you usually type the command *weather*. You can assign that command to a single Quickey and never have to type it again. Quickeys are associated with a specific host in the Phonebook.

Quickey text can include up to 255 characters — displayable characters, such as letters or numbers, or nondisplayable characters, such as carriage returns or control characters. For information on specifying nondisplayable characters, see Chapter 20, “Session Menu and Phonebook Commands.”

To assign a Quickey:

- ❶ Connect to the host as usual.
- ❷ Press the MENU key (F10).
- ❸ Choose the Modify Quickey command.
- ❹ In the “letter” field, type a letter. For example, *w*
- ❺ In the “text” field, type your series of keystrokes. For example, *weather*
- ❻ Press the ENTER key.

You have now assigned the series of keystrokes you typed in the “letter” field.

To assign a Quickey

If you add or modify a Quickey, or modify other settings associated with a host in your Phonebook, Access asks if you want to save these modifications permanently when you quit. If you choose “Yes,” Access updates the Phonebook with these changes. If you choose “No,” Access saves the Quickey only for the rest of the current session.

See Chapter 13, “Maintaining the Phonebook,” for more information about the Phonebook.

To use the Quickey you just assigned:

To use a Quickey

- When you would usually type the series of keystrokes, such as *weather*, press the Alt key and the Quickey letter (Alt-w) simultaneously.

The keystrokes will appear just as if you had typed them.

Recording Quickeys

Instead of using the Modify Quickey command, you can ask Access to record keystrokes as you type them. As Access sends the characters to the host, it assigns them to the Quickey you specify. For instance, you could record a command *Quote xyz* and assign it to a Quickey after connecting.

To record a Quickey

- 1 Press the RECORD ON/OFF key (F7). You will see a message asking you to enter a Quickey letter.
- 2 Type *q*
The status line now displays *Key-Q*
You can enter up to 255 characters.
- 3 Type *quote xyz*
- 4 Press the RECORD ON/OFF key (F7) again to instruct Access to stop recording.

You have now assigned the string of characters *quote xyz* to the letter *q*.

13 Maintaining the Phonebook

The Phonebook contains all the information you supply about a host, including the host name, telephone number, communications settings, and any Quickeys you have assigned.

When you connect to a host for the first time, using either the Install procedure or the Connect command, you can instruct Microsoft Access to create a Phonebook entry for the host. Using commands from the Phonebook menu, you can add a new host entry, delete an entry, or modify an entry.

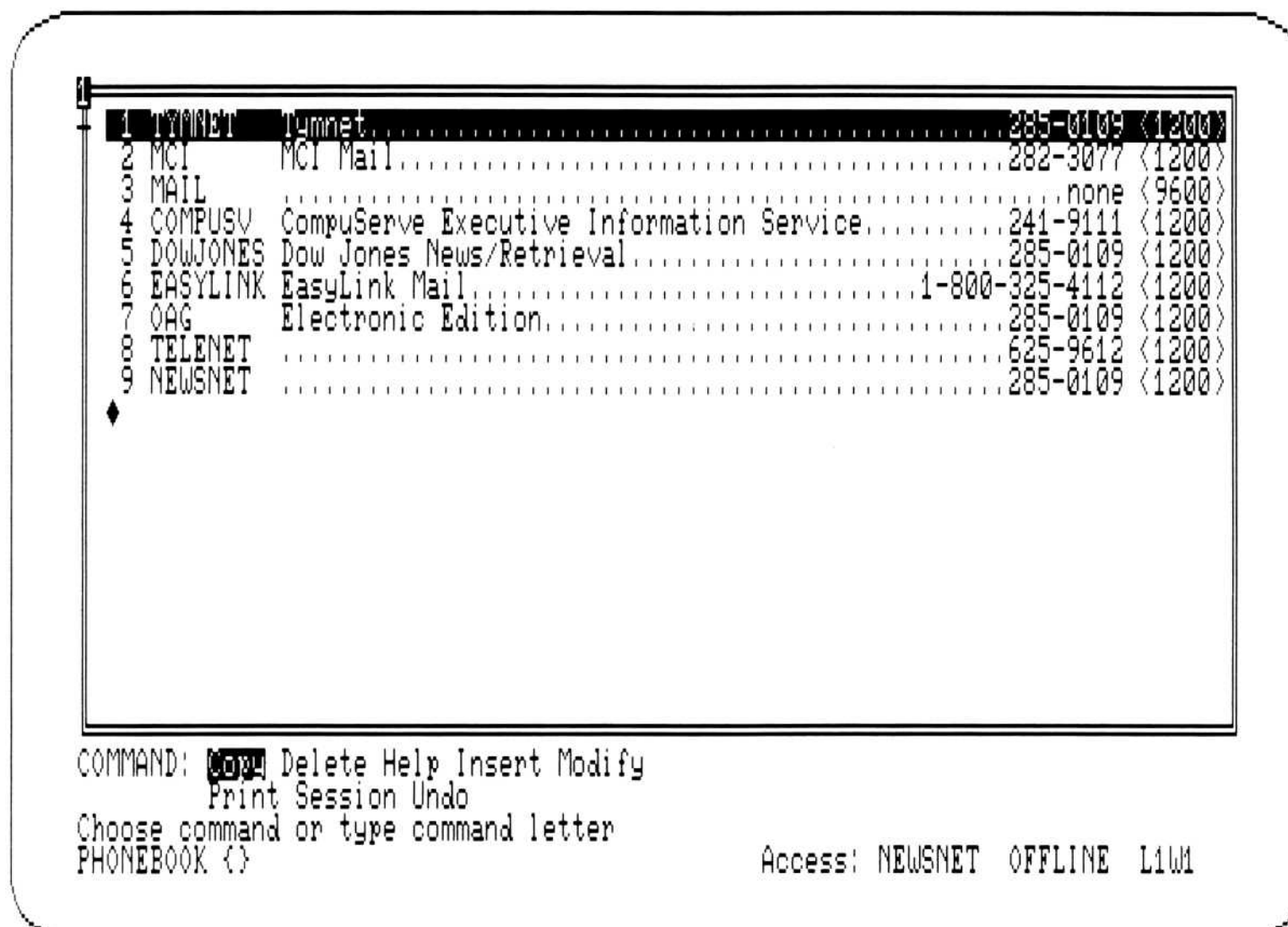
Adding a Host Entry

To work with the Phonebook, you choose the Phonebook command from the Session menu.

- Choose Phonebook from the Session menu.

The Phonebook appears.

To display the Phonebook



The Phonebook window lists host entries with the short names you use to identify them, their full names, their telephone numbers, and the baud rates used for communicating with them.

The Phonebook has its own menu of commands, which replaces the Session menu. The status line shows *PHONEBOOK { }*. The braces (*{ }*) are a symbol for the *scrap*, a temporary holding place, which is explained later in this chapter.

To insert a new host entry

To insert a new host entry into the Phonebook:

- 1 Use the direction keys to highlight the host directly below the line where you want the new host entry to be.
- 2 Choose the Insert command.
- 3 In the “name” field, type the name of the new host (up to eight characters).
- 4 In the “description” field, type the full name of the host.
- 5 In the “number” field, type the telephone number.
- 6 In the “use settings” field, choose “Default” to instruct Access to supply the standard settings appropriate for most hosts. Choose “Current” to use the settings that appear in the Modify Settings command fields.
- 7 Press the ENTER key.

The new host entry appears in the Phonebook.

Modifying Settings and Quickeys

While you are in the Phonebook, you can edit the communications settings or any Quickeys associated with a host.

To modify settings

- 1 Use the direction keys to select the host entry you want to modify.

- 2 Choose the Modify Settings command from the Phonebook menu.

The Modify Settings command fields appear. In the Phonebook menu, Modify Settings has three more fields than Modify Settings from the Session menu.

```

MODIFY SETTINGS name:          description:
      number:                  duplex: Full(Half)
      speed: 1200              parity: Even Odd Mark Space(None)
      word length: 7(8)        terminal: VT100 VT52(TTY)Debug
      stop bits:(1)2
      XON/XOFF:(Yes)No        end-of-line character:
      prompt character:        prompt timeout: 0
      prompt count: 0          pad blank lines: Yes(No)
      expand tabs: Yes(No)      add to input EOL: None CR(LF)
      filter input:(Yes)No     remove output file linefeeds:(Yes)No
      auto disconnect time: 0

```

The “name,” “number,” and “description” fields contain information for the host you selected.

- 3 Enter your changes in the “name,” “description,” and “number” fields.
- 4 Fill in the remaining fields just as you would the same fields of the Modify Settings command in the Session menu.
- 5 Press the ENTER key.

To modify Quickeys, use the Modify Quickey command in the Phonebook menu just as you would in the Session menu. Chapter 12, “Customizing Your Keyboard,” explains this command.

Modifying Quickeys

Copying Information

To add a host which will use the same settings as a host presently in the Phonebook, you can copy the existing entry using the Copy and Insert commands in the Phonebook menu. When you copy an entry, Access places it in the scrap, a temporary holding place. After you insert the copy into the Phonebook, you change the name of one of the entries to distinguish the two.

First, copy the Phonebook entry:

- 1 Use the direction keys to highlight the host entry you want to copy.
- 2 Choose the Copy command.

Access places a copy of the highlighted entry in the scrap, replacing what was there before. The contents of the scrap appear between braces in the status line.

To copy a Phonebook entry

- 3 Use the direction keys to highlight the entry that is directly below where you want the copy to appear.
- 4 Choose the Insert command and press the ENTER key. Or, press the Ins key.

The host entry you copied appears above the highlighted entry in the Phonebook. However, Access will not accept two entries with the same name, so you must rename one of them.

To rename an entry

- 1 Select the host entry you want to rename.
- 2 Choose the Modify Settings command from the Phonebook menu.
- 3 In the “name” field, type the new name. You may want to change the description as well.
- 4 Press the ENTER key.

Moving and Deleting Entries

Moving and deleting Phonebook entries

You can move or delete Phonebook entries with the Delete command. When you delete an entry, Access places it in the scrap. If you want to move the entry elsewhere in the Phonebook, you can then use the Insert command to reinsert the contents of the scrap. To delete a host permanently, you use the Delete command alone.

To move a host entry:

- 1 Highlight the entry you want to move.
- 2 Choose the Delete command or press the Del key.
Access places the deleted host name into the scrap, replacing what was in the scrap before.
- 3 Highlight the entry that is directly below where you want the moved entry to appear.
- 4 Choose the Insert command and press the ENTER key. Or, press the Ins key.

Access inserts the entry from the scrap in the new position.

Undoing a Change

If you change your mind, you can undo the most recent insertion, copy, or deletion.

- Choose the Undo command.

For example, if you delete a host name and then choose Undo, the host will reappear in the Phonebook. The previous contents of the scrap will be restored as well.

Printing the Phonebook

If your computer is connected to a printer, you can print a copy of your Phonebook.

To print a copy of your Phonebook:

- 1 Choose the Print Printer command from the Phonebook menu.
- 2 Choose “Table” to print a copy with the same format as the Phonebook display. Choose “Detail” to print each host on a separate page with the settings in the Modify Settings command fields and the Quickey assignments.
- 3 Press the ENTER key.

You can also “print” a formatted copy of your Phonebook to a file so you can print it later.

- 1 Choose the Print File command from the Phonebook menu.
- 2 In the “name” field, type a filename.
Access stores the copy of your Phonebook under this name.
- 3 In the “format” field, choose “Table” if you want a file with the same format as the Phonebook display. Choose “Detail” if you want each entry to appear on a separate page with the settings in the Modify Settings command fields and the Quickey assignments.
- 4 Press the ENTER key.

Once you have created this Phonebook file, you can print it at your convenience.

Undoing a change

To print the Phonebook

To copy the Phonebook to a file

Getting Help

You can get help at any time, either by choosing the Help command or by pressing the HELP key (Alt-h). Both these methods work exactly the same way in the Phonebook menu as they do in the Session menu. See the Help command in Chapter 20, “Session Menu and Phonebook Commands,” for details.

Returning to the Communications Session

Returning to the Session menu

While you are in the Phonebook menu, you cannot communicate with the host. When you want to resume communications, you must return to the Session menu:

- Choose the Session command.

Access asks if you want to save any changes you made to your Phonebook. Choose “Yes” to save the changes you have made. If you choose “No,” the changes stay in effect for the rest of the current session; when you quit, Access will ask again if you want to save the changes. When you have made your choice, Access returns you to the Session menu and you can resume communications.

14 Communicating with Several Computers

If you have more than one communications line, you can use Microsoft Access to communicate with more than one host at a time. For example, you could be working on your home computer and need financial data from both an information service and your office computer. With Access, you can connect to both hosts and display information from each in separate windows.

You can do all of the tasks in your communications sessions that you normally do when you are connected to only one host.

Even if you have only one communications line, you can display information for your reference in one window while you work on something else in another window.

Note It is not recommended that you use multiple communications lines while you are connected to a host for which Access has Custom Menus; Custom Menus are designed for use with a full screen.

Using More Than One Communications Line

To connect to more than one host at a time, you must specify communications settings for each communications line. One communications line is active and responds to the keyboard; the other is inactive and simply receives and displays information from the host.

The following procedure shows how to connect to one host on communications line 1, and another host on communications line 2.

To connect to two hosts

To connect to two hosts:

- 1 Use the Connect command to connect to the first host, as usual.
- 2 The proposed response in the “on comm line” field is usually “1”. If it is not, change the response and press the ENTER key to connect.
- 3 When you are connected, press the MENU key (F10) to return to the Session menu.
- 4 Choose the Goto command.
- 5 In the “on comm line” field, type 2 to change the active communications line from 1 to 2.
- 6 Press the ENTER key.

The status line changes to show which communications line is active:

```
SESSION                                Access:      OFFLINE L2W1
```

Now you will connect to the second host on communications line 2.

- 7 Use the Connect command to connect to the second host, as usual. The “on comm line” field should display “2”.

You are now connected to both hosts. As you can see in the status line, communications line 2 is active, and you can communicate with the second host.

You can now alternate between the two hosts by switching communications lines.

To communicate with the first host, make line 1 active:

- Press the NEXT COMMLINE key (SHIFT-F1).

Pressing the NEXT COMMLINE key again will reactivate line 2.

If you receive information from both hosts simultaneously, the characters will appear intermingled. This could make the information from each host difficult to distinguish. To separate information from the two hosts, you can split your screen into windows, one for each host.

Using Windows

You can split your screen into as many as eight windows, each with its own characteristics. You can split a window horizontally or vertically, and you can make each a different size.

You can also make the windows more distinguishable by framing them with borders. The examples that follow assume that line 1 is active.

Splitting Windows

You can split a window vertically or horizontally. For example, to split your original window horizontally:

- 1 Choose the Window Split Horizontal command from the Session menu.
- 2 In the “at line” field, type the number of the line where you want the window split.
- 3 In the “assign comm line” field, change the response to “2” to assign window 2 to communications line 2.
- 4 Press the ENTER key.

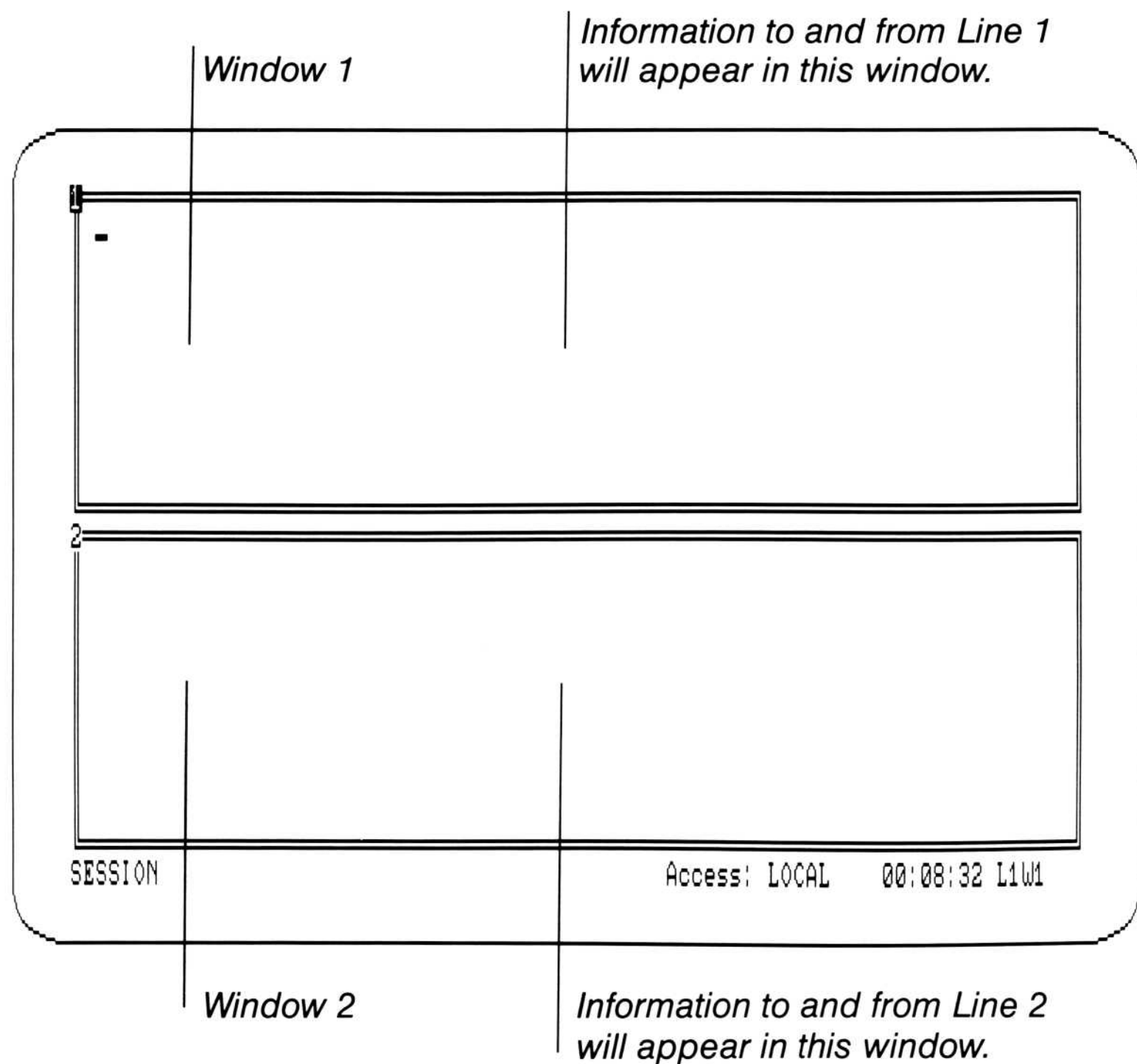
You now have two windows, one above the other. Window 1 is assigned to communications line 1; window 2 to line 2.

- 5 Choose the Connect command to resume communications.

All information passing through line 1 now appears in window 1; information through line 2 appears in window 2.

To switch communications lines

To split a window horizontally



The new windows have borders and an identifying number in the upper left corner. A highlight indicates the current active window — window 1.

Notice that information in the original window scrolled up when you made the split to make room for the new window. You can review any information that has scrolled off the screen by using the direction keys, and resume communications by pressing the PAUSE ON/OFF key (F9).

Splitting a window vertically

You can also split a window vertically. The following example splits window 2. First make sure window 2 is active (highlighted). If it is not, press the NEXT WINDOW key (F1). Now, to split the window:

- 1 Choose the Window Split Vertical command from the Session menu.
- 2 In the “at column” field, type the number of the column where you want the window split.
- 3 Type the number of the communications line you want to assign to this window in the “assign comm line” field.

- 4 Press the ENTER key.
- 5 Choose the Connect command to resume communications.

The information in the original window will be truncated visually to make room for the new window. You can review the information that is off the screen by using the direction keys, and resume communications by pressing the PAUSE ON/OFF key (F9).

Any new information that comes in after the vertical split will not be truncated; it will be adjusted to fit within the margins of the window.

Adding Borders

To add a border to a window:

- 1 Choose the Window Options command from the Session menu.
- 2 In the “window number” field, type the number of the window you want.
- 3 Choose “Yes” in the “borders” field.
- 4 Press the ENTER key.

Access frames your window with a border. If you split this window, the new window will also have a border. Split windows have the same characteristics as the “original” window.

Closing Windows

When you want to close a window, use the Window Close command.

- 1 Choose the Window Close command.
- 2 Type the number of the window you want to close.
- 3 Press the ENTER key.

When you close a window, the numbers of the remaining windows change. For instance, if you close window 1, window 2 becomes window 1.

The area previously occupied by the window you closed is added to an adjacent window and is available for subsequent text.

To add a border

To close a window

Using X.PC Channels

If you have installed the X.PC driver in your computer and are communicating with a host that supports X.PC, you can communicate with multiple computers through different channels on the same communications line. See Appendix D, “Using X.PC Connections,” for information on making X.PC connections.

Switching channels

Once you connect to a host computer that supports X.PC connections, the Access status line displays the channel number as well as the number of the communications line. You use multiple channels just as you would multiple lines, as described in the previous sections. For example, to switch channels, press the NEXT COMLINE key (SHIFT-F1).

See Chapter 20, “Session Menu and Phonebook Commands,” for information on specifying a channel in the “on comm line” field of the Connect command.

15 Adjusting Your Screen Display

You can change the color, margins, or tab settings of windows on your screen, as well as add borders to them. (Adding borders is explained in Chapter 14, “Communicating with Several Computers.”)

Changing Colors

If you have a color monitor, you can use the Window Options command to specify colors for the foreground, background, and borders. If you have a monochrome monitor, the results will be monochromatic shades.

- ❶ Choose the Window Options command.
The proposed responses in the command fields reflect the current display.
- ❷ In the “window number” field, type a window number.
- ❸ In the “paint background,” “foreground,” and “border” fields, type a color number or choose from a list of colors by pressing any direction key.
- ❹ Press the ENTER key.

Access will repaint your screen in the colors you chose.

Setting Margins

You can change the right margin of a window, specify wordwrap, or request a margin bell.

If you plan to use multiple windows for a communications session, you may want to change the margin before you begin. That way you can avoid truncating any information in the split window.

**Changing the colors
in a window**

Changing the margin

To change the margin:

- ❶ Choose the Window Options command.
- ❷ In the “window number” field, type the number of the window you want.
- ❸ In the “margin position” field, type the column number where you want your line to end.

The proposed response of “d” places margins at the last column of the screen (column 80) or the last column of the specified window.

A response of “0” eliminates the right margin, so that characters beyond the last column of your screen or window do not appear. You can use direction keys to review these characters.

- ❹ Press the ENTER key.

Setting wordwrap

Whether you are sending or receiving information, you may not want words broken at the end of the line. You can choose to have the words wrap to the next line. The following shows a line with and without wordwrap:

Text without wordwrap

```
{The quick brown fox jumped over the extr  
emely lazy dog.
```

```
{The quick brown fox jumped over the  
extremely lazy dog. _
```

SESSION

Access: LOCAL 00:06:37 L1W2

Text with wordwrap

To set wordwrap:

- ❶ Choose the Window Options command.
- ❷ Choose “Yes” in the “wordwrap” field.
- ❸ Press the ENTER key.

You can have a margin bell alert you when you approach the margin.

In order for the margin bell to ring, the “No” option must be set in the “mute” field of the Options command.

- ❶ Choose the Window Options command.
- ❷ In the “margin bell” field, choose “Yes.”
- ❸ Press the ENTER key.

Setting a margin bell

Setting Tabs

You may also want to change the tab positions.

- ❶ Choose the Window Options command.
- ❷ In the “window number” field, type the number of the window you want.
- ❸ In the “tab spacing” field, type the number of columns you want between tabs. The spacing is set to “8” until you change it.
- ❹ Press the ENTER key.

To change tab positions

16 Answering Calls and Using Remote Control

When Microsoft Access answers a call from another computer, you can control Access as usual from your microcomputer, or remotely from the calling computer.

Remote control is a convenient way to use the capabilities of your microcomputer from another site. For example, you might take a portable computer with you on business trips and use it to call your microcomputer and transfer files from the portable to your microcomputer.

Answering a Call

Answering a call

You can set Access to answer a call in one of two ways:

- Answer the call and take instructions, as usual, from the receiving computer. This is called *local control*.
- Answer the call and take instructions from the calling computer. This is called *remote control*.

To answer a call and retain local control:

- 1 Choose the Answer command.
- 2 In the “as name” field, enter the name of the host.
If you enter a name that is not in the Phonebook, Access cannot carry out the command and will display an error message. However, you can leave the field blank and Access will use current communications settings.
- 3 In the “on comm line” field, type the communications line you are using.
- 4 In the “control” field, choose the proposed response of “Local.”
- 5 Press the ENTER key.

You will see a message telling you that Access is waiting for the phone to ring. When the phone rings, Access answers and immediately connects you to the calling computer.

Setting Access for remote control

Setting Access for Remote Control

You can also use the Answer command to set your computer for remote operation. This means you or another operator can control the communications session from another computer. For example, an associate may need to send a file to you while you are away. You can set Access to answer the call and accept commands from the other computer. The associate calls, Access answers, and the associate instructs Access to capture the file to disk.

To set Access for remote control:

- 1 Choose the Answer command.
- 2 Fill in the “as name” and “on comm line” command fields.
- 3 In the “control” field, choose “Remote.”
- 4 Press the ENTER key.

Access waits for the phone to ring. When it answers the call, it takes all commands from the caller. The status line displays the word *REMOTE*.

When you have given control to the caller, Access no longer responds to the local keyboard.

To switch back from remote control to local control:

- Press the Esc key.

Access asks if you want to return to normal operation. Choose “Yes” to resume local control of Access. You are still connected.

Resuming local control

Switching from local to remote

Similarly, you can switch from local to remote control during a communications session, whether you have answered or made the call.

To switch from local control to remote control:

- 1 Choose the Options command.
- 2 Choose “Remote” in the “control” field.

When Access is set to answer, you can prevent unauthorized calls by instructing Access to request a password from the caller.

To set a password:

- 1 Choose the Options command.
- 2 In the “login password” field, type a password.
- 3 Press the ENTER key.

Controlling Access from a Remote Computer

You control Access from a remote computer much the same way you do locally. This section explains variations you may encounter.

In addition, the remote machine — microcomputer, mainframe computer, or portable computer — may have a different keyboard from the one you usually use to run Access. See Appendix A, “The Keyboard,” for more information on remote terminal keys.

To operate Access from a remote computer:

- 1 Make sure both computers are using the same communications settings.
- 2 Dial the number of the other computer (the one running Access).
- 3 If requested, type in the password.
- 4 Choose a command by pressing the first letter of the command (for example, T for Transfer).
- 5 Press the ENTER key.

While controlling the communications session from the remote computer, you can send a message and instruct Access to save it.

- 1 Choose the Transfer Capture command by pressing T, then C.
- 2 Enter a filename in the “filename” field.
- 3 Press the ENTER key.

The screen of the remote computer (the one you are using) will look something like this:

```
COMMAND: T
TRANSFER: C
TRANSFER CAPTURE filename: NAME
COMMAND: C
```

Setting a password

To operate Access from a remote computer

To send a message

- 4 Type your message.

Access starts capturing your message on the other computer.

- 5 Press Ctrl-Z to tell Access to stop capturing your message.

To end a session

To terminate the session:

- Choose the Disconnect command.

The computer running Access is now ready to answer the next call.

For more information on using Access' remote control capability, see the Answer command in Chapter 20, "Session Menu and Phonebook Commands."

17 Using Voice Communications

You can switch back and forth between data communications and voice communications in a Microsoft Access session. For example, you might want to interrupt regular data communications to discuss a problem in transmitting files. If your modem supports voice/data communications, you can talk with the operator at the other end of the communications line, as long as the operator is using a microcomputer and has a modem with voice/data capability.

Switching to Voice Communications

Switching to voice communications

To switch to voice communications, your host operator must be using a microcomputer but need not be using Access.

To switch to voice communications:

- 1 Connect to the other microcomputer (the host) as usual.
- 2 Press the VOICE key (SHIFT-F4). Access sends a message to the host requesting voice mode.
- 3 If the host is running Access, the host operator presses the VOICE key in response to the message. This sends a plus sign (+), indicating a positive response, to your computer.

If the host is not using Access, the host operator must type the +. Access waits 15 seconds to receive the + signal from the host.

When Access receives the + signal, a message telling you to pick up your handset appears on both screens.

- 4 Pick up your phone handset within five seconds or you will lose the connection.

After you have picked up the handset and the five seconds have elapsed, both modems drop the carrier, and Access displays the Session menu. You can now speak to the other operator just as if you had placed a telephone call.

If the host does not send the + signal within 15 seconds, Access displays a message indicating it received no reply to the voice mode request, and asks you to press Y to continue. It also sends a message to the host saying that the voice mode request was canceled. When you press Y, Access resumes data communications.

You can return to data communications during the 15-second waiting period by pressing the Esc key. Access displays a message indicating that the voice mode request was canceled, and asks you to press Y to continue. It also sends a message to the host saying that the voice mode request was canceled. When you press Y, Access resumes data communications.

Switching to Data Communications

Before you switch back to data communications from voice communications, you and the host operator must decide who will be the “originator” and who will be the “answerer.” Also, you must both activate your modems at the same time, or you will lose your connection.

To resume data communications, if you are the originator and the other operator is the answerer:

- ❑ 1 Choose the Connect command.
- ❑ 2 Type *originate* in the “phone number” field.
- ❑ 3 If the host is also using Access, the host operator uses the same procedure, but types *answer* in the “phone number” field.

If the host is not using Access, the host operator must enter the appropriate commands to instruct the host modem to answer.

- ❑ 4 Press the ENTER key.

The modems are now active.

Both you and the host operator will hear a tone.

- ❑ 5 Hang up your phone handset.

Access resumes data communications and you can continue your session.

To resume data communications

18 Writing Scripts

Microsoft Access Script Commands (MASC) make up a powerful command language that lets you automate and customize your Access sessions. This chapter explains how to use the MASC language to create programs that can range from a simple login script to a complex script that connects you to a mail service, checks for new mail, and then saves it to disk.

Once you have learned how to use MASC, you can build new Custom Menus to make it easier to use corporate mainframe computers or information services.

If you have some programming experience, you will find that learning to write scripts is not difficult. With the Editor, you can edit, debug, and modify scripts without leaving Access. See the Run Editor command in Chapter 20, "Session Menu and Phonebook Commands," and Chapter 19, "Using the Editor."

The following section explains the basics of scripts. If you are already familiar with programming languages, you may want to skim this section, then study the next section, "The Microsoft Access Script Command (MASC) Language," for details about MASC.

What is a Script Program?

Like a program written in a language such as BASIC or PASCAL, an Access script is a series of statements contained in a file, one statement per line. Each statement gives Access an instruction, such as to make a phone call, transfer a file, or wait for the host computer to send a message. When you run a script, Access starts with the first line, performs the requested action, and then moves to the next line. An example of a simple script follows. Note that the comments following a single quotation mark help you or another reader interpret the script, but Access ignores them.

What is a script program?

SEND ".IBM AAPL GM"	'1. send these ticker symbols
MATCH "Stock Reporter"	'2. wait to receive string
WAIT 5	'3. wait 5 seconds
SEND ".IBM 01"	'4. send the next request

Like this example, the simplest scripts are linear; that is, the computer carries out each task in order, one after the other.

Scripts are not limited to simple linear statements, however. They can branch or loop, just like any program. For example, you might want to write a script that logs into an electronic mail service and checks for new mail. You know in advance that after you log in, the service displays one of two messages:

You have mail

No new mail

Your script would test for these messages, then carry out a different action depending on which message it found. In the first case, the script would instruct Access to go to ("branch to") the section of the program for downloading new mail and logging off. In the second case, the script would instruct Access to branch to the section of the program for simply logging off.

MASC contains several types of "conditional" statements, including IF . . . THEN . . . ELSE, familiar to BASIC users, and the CASE statement, familiar to PASCAL users. The following sections describe these and other statements. See also Chapter 21, "Microsoft Access Script Commands."

Statements

Statements

MASC programs are made up of statements. The form of each statement is precisely defined. In most cases, a statement looks like this:

label: command argument1, argument2, . . .

Labels

Labels

Labels identify important statements. In scripts that branch, labels mark locations. For instance, the script statement GOTO LOGOFF instructs Access to go to the line with the label LOGOFF. A simple example follows:


```

      INPUT ANSWERS$
      IF ANSWERS$ = "YES" THEN GOTO LABEL1 ELSE GOTO LABEL2
LABEL1: TYPE "You answered yes."
      GOTO END
LABEL2: TYPE "You didn't answer yes."
END:    STOP

```

This script prompts the user to answer a question. If the answer is yes, a confirmation message appears on the screen. If the answer is anything other than yes, the other message appears.

Labels can be any length, but the first 16 characters must be unique. Identify labels by placing them at the beginning of the line, and follow each with a colon. (Do not include the colon when referring to labels in the statements themselves, such as GOTO LOGOFF.) Unlike BASIC, which requires line numbers, MASC labels are optional; label statements are necessary only to indicate locations for branching.

Commands

A command is the heart of most script statements. Almost every statement (except assignment statements) has a command. Each command represents a different script operation. Arguments modify the command and provide more precise instructions. For example, the CONNECT command prepares Access to make a phone call, but it requires an argument defining what telephone number (or Phonebook entry) to call.

Variables

Variables are a special type of argument. A variable name must start with a letter. It can include letters, numbers, and the underscore character, and can be any length, as long as its first 16 characters are unique. The last character of the variable name indicates what type of variable it is.

String variables represent words; the string variable name must end with a dollar sign (\$).

Numeric variables represent numbers, and make it possible for you to perform a wide range of arithmetic functions. There are three types of numeric variables: integer variables, floating variables, and long variables. Integer variables can range from –32768 to 32767. The variable name does not require a suffix character. Floating variables include a decimal point. The variable name must end with an exclamation point (!). Long variables are used for very long numbers, such as date integers in 7-day format. The variable name must end with a pound sign (#).

Commands

Variables

For example, the variable TEST takes on different meanings in each of these forms:

Variable name	Variable type
TEST\$	string
TEST	integer
TEST!	floating
TEST#	long

You assign a value to the variable in an assignment statement somewhere in the script; then, when you use the variable as a command argument, Access refers to this value.

An assignment statement looks like an equation. For example, “TEST=5” assigns the value 5 to the variable TEST. Or, if you wanted to simplify connecting to a service listed in the Phone-book, you could write a script asking the user to enter the name of the service, then assign that response to a variable named “SERVICE\$”. Thereafter, the statement “CONNECT SERVICE\$” would instruct Access to place a call to the specified service, without requiring that the name be entered each time.

Chapter 21, “Microsoft Access Script Commands,” explains all of the commands in alphabetical order and lists the required arguments for each command in the order in which they must appear. The syntax, or order, of each statement must be correct for Access to respond to it.

The Microsoft Access Script Command (MASC) Language

Microsoft Access Script Commands

The many Microsoft Access Script Commands let you write powerful and flexible scripts. However, you will regularly need only a small subset of these commands. The following is an overview of the three major types of MASC commands.

Communications Commands

Communications commands duplicate the tasks you can perform in the Access Session menu. You use these commands to connect, capture and print, transfer files, and even adjust your screen display. These commands frequently share the same name as their Session menu counterparts. Whenever you want to do something in script that duplicates what you do in the Session menu, refer to

the table in the “Session Menu Command Equivalents” section of Chapter 21, “Microsoft Access Script Commands,” for Session menu MASC equivalents. Chapter 21 also includes an explanation of each MASC command.

Language Commands

Language commands, which appear in almost every programming language, provide the logical structure of the script and make it flexible by allowing branching (jumping to a different part of the script), looping (repeating a series of commands), and conditional statements (IF...THEN...ELSE). Language commands let you create interactive scripts. For example, you can instruct Access to display a set of options on the screen and then prompt the user to enter a choice. Depending on the user’s choice, the script can branch to the statement representing a response to that choice.

Utility Commands

Utility commands allow date manipulation, electronic mail message handling, changing the active disk drive, and other useful tasks. Many of these commands are similar to those used in BASIC for string and variable manipulation.

Using all three types of MASC commands puts you in complete control of your computer and allows you to customize almost any communications task to your needs.

Creating Scripts

You can create a script in either of two ways: you can write it in MASC statements, as you would write a program in any other language; or you can use the Learn command to record your steps, then modify the recorded script to customize your online session even more.

Writing Scripts

Writing scripts requires planning. First, you may want to draw a flow chart to outline each of the steps clearly. Next, for each part of the script that interacts with the host, connect to the host and carry out the actions you want to include in your script. Capture or print this session to learn exactly what commands to send to the host, and what responses you can expect. Experiment to see if the host responds to the same request differently depending on circumstances. For example, when you request stock price

Writing scripts

information, the host may display various messages depending on whether or not it can find information on that stock.

You can use the Editor to create script files, identified with the .SCR extension. Give the variables descriptive names and labels clearly indicating their functions. This helps when you are reviewing and debugging the program. Finally, write comments to describe what you are doing at any given point in the script, so that someone else who reads the script will be able to figure out how it works. Begin each comment with a single quotation mark, signaling Access to ignore the rest of the line.

Using the Learn Command

Using Learn

An easier way to create simple scripts or scripts involving considerable interaction with the host is to use the Learn command and the “learn login” field of the Connect command. Both generate files written in the MASC language using the same commands you would use to write the script.

For example, choose “Yes” in the “learn login” field of the Connect command and then use the following login procedure for an information service (user responses are enclosed in brackets):

```
Enter terminal identifier: {A}
What service please???
{INFORMATION <ret>}
WELCOME TO INFORMATION!!!

Enter account number: {707505 <ret>}
Enter password: {Bananas <ret>}
```

In this example, the user waits for the computer to prompt for information, then enters the appropriate response. After you have closed the file (using the Learn command), the learned script file would look something like this:

```
MATCH "Enter terminal identifier: ",10
SEND "A";
MATCH "What service please???^M", 8
SEND "INFORMATION"
MATCH "Enter account number: ",5
SEND "707505"
MATCH "Enter password: ",5
SEND "Bananas"
```

The only commands in the example above are MATCH and SEND. All the items in quotation marks and the numbers at the end of each MATCH line are arguments.

When you run the script (the next time you call this service), Access matches the text in quotes against whatever the host sends. The number 10 in the first statement indicates that Access should wait at most 10 seconds to make the match: if not matched within 10 seconds, the script resumes at the next statement. When a match occurs, Access sends the text in quotes, in this case the terminal identifier “A”. Access follows this send-and-match procedure for the rest of the login.

Note The MATCH command is case-sensitive; that is, it distinguishes between uppercase and lowercase letters. Thus the statement ‘MATCH “PASSWORD:”’ will not match the string “password:”. While Learn generates correct MATCH statements, you should be careful to use the correct case when you write your own scripts. You do not need to match the entire string from the host as long as what you match is unique and won’t be matched by an earlier occurrence. Keeping the match string short helps prevent mismatches due to line noise.

See Chapter 11, “Automating Communications Sessions,” for more information on the Learn command and the “learn login” field of the Connect command.

Using Scripts

This section describes how to perform several tasks using scripts.

Connecting

The CONNECT command instructs Access to dial the selected host. If a Phonebook entry for that host exists, Access uses the settings associated with that entry. In that case, the command is simply:

```
CONNECT "hostname"
```

Where no entry exists, the user must provide the telephone number and may also provide the name and transmission speed. For example, the command for dialing a service called “INFO” is:

```
CONNECT "INFO", "555-1234", 1200
```

Connecting

Note Even if you decide not to use a host name as an argument, you must put in a pair of quotation marks with nothing inside before the telephone number (for example, CONNECT "", "555-1234"). Otherwise, Access will mistake the telephone number for the service name, and the error message "Not valid syntax" will appear.

Expecting Multiple Matches

Multiple matches

Often you cannot predict what message the host will send. For example, suppose you want to add to the information service login file created in the previous section; you want the script to check for mail. The service may send you one of two messages: "You have mail" or "No mail waiting." If you have new mail, you want to open a file called *mail.doc*, capture the mail to it, and log off. If you do not have mail, you want to simply log off.

Because Access will encounter one of two messages, depending on whether or not you have mail, you cannot use the MATCH command; instead, you use a related technique. Follow the MATCHBEGIN command with a number of CASE commands, each case representing one possibility for what the host computer will do. Follow each CASE statement with several statements to be carried out if the case is matched. A MATCHEND statement finishes the routine. Such a program would look like this:

```

MATCHBEGIN
  CASE "You have mail"
    CAPOPEN "MAIL.DOC" 'same as Transfer Capture
    SEND "READ ALL"
    MATCH "End of messages"
    CAPCLOSE 'closes the captured file
    GOTO LOGOUT
  CASE "No mail waiting"
    GOTO LOGOUT
MATCHEND
LOGOUT: SEND "QUIT"
        MATCH "Off at:"
        DISCONNECT

```

Notice the use of tabs and indents to keep the program legible. Access ignores all text (comments) after the single quotation mark.

Directing Input and Output

Directing input and output

Printing You can control the printer using the `PRINTER` statements, just as you do with the `PRINT ON/OFF` key (F4).

```
PRINTER=ON
PRINTER=OFF
```

You can also use “1” for on and “0” for off.

Capturing You can capture information directly to disk using a three-step procedure similar to the Session method:

- 1 First, open a file using the `CAOPEN filename` command. Capturing begins immediately.
- 2 Next, turn capture on and off with the commands:

```
CAPTURE=ON
CAPTURE=OFF
```

- 3 When capturing is complete, close the file with the `CAPCLOSE` command.

Just as in a session, in a script you can have only one capture file open at a time. Also, if capture is turned on before a file has been opened, the captured information will go to a file named `TEMP`. Be sure to close any open files before ending your script.

Displaying Script files can control screen display. To turn the screen display on and off, use the `DISPLAY` command.

```
DISPLAY=ON
DISPLAY=OFF
```

This command allows you to hide irrelevant information from the user. Whether `DISPLAY` is on or off, information continues to arrive and all following commands (such as `MATCH`) will still work.

To clear the active window, use the `CLW` command.

To display customized messages and queries, use the TYPE command. New text will appear at the current cursor position immediately following the most recent information. To control where the text appears, use the POS command:

POS row,column

Row and *column* represent the position of the cursor. For example, *POS 1,1* positions the cursor at the upper left corner of the screen.

As an example, the following script statements clear the screen and display a menu of choices:

```
CLW
POS 2,10
TYPE "1. Get Mail"
POS 4,10
TYPE "2. Send a message"
POS 6,10
TYPE "3. Retrieve stock quote"
POS 8,10
TYPE "4. Look up airline schedule"
```

Querying the User You can now ask the user to choose an option by using the INPUT command. Follow the INPUT command with a string variable to assign the answer to, even if the choice is numeric (in this case, a number from 1-4).

```
POS 10,10
TYPE "Enter your choice:"
INPUT CHOICES
```

Running a Delayed Script

Running delayed scripts

You can write a script that starts at a specified time. Because online time is cheaper during the late evening and early morning, you may want to wait until then to run a script. You can accomplish this using the system variable "TIME\$" and the operator "<>".

Access automatically creates the "TIME\$" system variable, which contains the system time. If you do not have a clock on an expansion card in your computer, be sure to set the time in DOS before you start Access.

```
CALL: WHILE TIME$<>"06:00:00"
      WEND
      CONNECT "INFO", "555-1234", 1200
```


The symbol “<>” means “is not equal to.” The WHILE and WEND statements form a loop. As long as the WHILE statement is true — that is, the value of TIME\$ is not equal to 6:00 — the script remains in the loop. When the WHILE statement becomes *false* — the value of TIME\$ *does* equal 6:00 — Access carries out the next statement: in this case, it connects.

Working with Dates

Another system variable created by Access is “DATE\$”, which contains the current date (the date that DOS uses when it creates a file). Again, use the DOS DATE command before starting Access if you don’t have an internal clock. DATE\$ is a text string in the form “mm/dd/yy”.

MASC contains several commands that let you work with dates. You can change a date from one format to another (for example, from 3/14/85 to March 14, 1985). You can also convert dates to integers and use them in date arithmetic. For example, you could subtract one date from another to determine the number of days between them. When using integer dates, you can work with a seven-day week or a five-day week of business days. See the CVD, CVD\$, and CVDF commands in Chapter 21, “Microsoft Access Script Commands,” for more details.

Testing the Environment

Several MASC commands let you control your environment. You can check to see if a given file already exists, check the amount of free space on the disk, control action if the communications line is disconnected, determine what drive to locate information on, and work with directories.

For example, it’s usually a good idea to see how much free space you have on a disk before you capture or download a large file. The following statement checks drive A to see if there are at least 10000 bytes available. If not, it switches to drive B.

```
IF DISKSPACE("A") <10000 THEN DRIVE$="B:"
```

Bulletproofing

Line noise may distort commands sent to the host. Or, the responses you get from a host may not meet your script’s expectations. A carefully written script anticipates these possibilities and includes statements to handle them if they occur. This is sometimes called “bulletproofing.”

Working with dates

Testing the environment

Bulletproofing

MASC provides a system variable named "ERROR". If an error occurs, such as failure to connect or inaccurate file transfer, Access sets the value of ERROR to the appropriate error number.

Consider the earlier example of a script that dials a mail service at 6:00 and downloads mail. If the line is busy, Access will fail to make the connection. You can instruct Access to try again, as follows:

```
CALL:    CONNECT "INFO","555-1234",1200
         IF ERROR <> 0 THEN GOTO CALL
```

Another problem could arise while logging in. If line noise distorts the password, you may get the message "Password incorrect" and a prompt to try again. The MATCHBEGIN/CASE/MATCHEND combination works well in such a case. Instead of using MATCH to check for a successful match, use a series of CASE statements to cover all the possibilities. For example:

```
PASS:    MATCH "Enter password:",5
         SEND "Bananas"
         MATCHBEGIN
           CASE "Password incorrect"
             GOTO PASS
           CASE "Welcome to Mail"
             GOTO MAIL
         MATCHEND
```

Example of a complete script

Example of a Complete Script

You have now constructed an entire script to call a mail service at 6:00, log in, check for mail, download your mail, and log off. The script looks like this:


```

        WHILE TIMES <> "06:00:00"
        WEND
CALL:    CONNECT "INFO","555-1234",1200
        IF ERROR <> 0 THEN GOTO CALL
        MATCH "Enter terminal identifier: ",10
        SEND "A"
        MATCH "What service please???^M",8
        SEND "INFORMATION"
        MATCH "Enter account number: ",5
        SEND "7070505"
PASS:    MATCH "Enter password:",5
        SEND "Bananas"
        MATCHBEGIN
            CASE "Password incorrect"
                GOTO PASS
            CASE "Welcome to Mail"
                GOTO MAIL
        MATCHEND
        MATCHBEGIN
            CASE "You have mail"
                CAPOPEN "MAIL.DOC" 'same as Transfer Capture
                SEND "READ ALL"
                MATCH "End of messages"
                CAPCLOSE 'closes the captured file
                GOTO LOGOUT
            CASE "No mail waiting"
                GOTO LOGOUT
        MATCHEND
LOGOUT:  SEND "QUIT"
        MATCH "Off at:"
        DISCONNECT

```

Once you have created a script, either by writing it yourself or using the Learn command, it is ready to be run, tested, and debugged.

Running and Debugging Scripts

Debugging a script simply means running it, identifying errors where it fails to work properly, and correcting the problems. Usually the problem is as simple as a missing comma, missing argument, or spelling error.

To run a script, choose the Run Script command and enter the name of the script file. Access loads this file and begins to run it immediately, displaying *Scr* in the status line to indicate that a script is running.

Access provides debugging assistance. If Access detects an error in the script, it stops the script, returns to the Session menu, and displays a message on the prompt line indicating the line number and nature of the error. For example, the error message:

```
Not valid syntax INFO.SCR QUOTES:+4
```

Running and debugging scripts

means that there is an incorrectly phrased statement at the fourth line after the label "QUOTES:". When you edit the script file, search for "QUOTES:" and count down four lines. For a complete list of MASC error messages, see Chapter 22, "Messages."

Aborting a Script

To stop running a script, press the Esc key twice. Access requests confirmation before stopping the script. There are MASC commands you can use to alter what happens after the Esc key is pressed. For more information, see the LOCK and WHEN CANCEL commands in Chapter 21, "Microsoft Access Script Commands."

Advanced features

Advanced Features

Creating Startup Scripts

You can run a script automatically when you start Access.

At the DOS prompt, type *access* followed by a slash (/) and the name of a script. For example, *access /mail* loads Access and immediately starts running the Mail Custom Menu.

Using Message-Handling Commands

MASC features a series of commands designed to handle CCITT standard electronic mail messages. These commands, which all begin with MHS (for Message Handling System), read and write messages in a form which is recognized by most electronic mail systems. These commands are valuable in writing Access electronic mail applications. For more information on these commands, see Chapter 21, "Microsoft Access Script Commands."

Creating Custom Menus

Creating a Custom Menu such as those described in Chapters 4 through 8 is beyond the scope of this manual. It involves writing a menu file which describes the menus and command fields in your Custom Menu system. Access compiles (pre-processes) this menu file using a special utility. The compiled menu file then works with your script file to create a Custom Menu system.

To obtain the menu compiler and full information on creating Custom Menus, fill out the enclosed order card for the Microsoft Access Script Developers Kit. Send the card and your check to Microsoft.

19 Using the Editor

This chapter tells how to use the Editor and summarizes Editor commands. The Editor, an adaptation of Microsoft Notepad, is a text editor you can use in working with Access. With the Editor, you can:

- Edit information captured in a communications session.
- Create and edit script programs.
- Create and edit your messages in Mail.

You enter text by typing it exactly as you want it to appear, using the spacebar and TAB key to format the text.

Note You must end each line with a carriage return.

After you enter the text, you can revise it with the editing commands. First, you select the text you wish to delete, move, or copy. Then you choose a command or press a key to edit the selection.

If you have a mouse connected to your computer, you can use the mouse instead of the keyboard to select text and choose commands.

Starting the Editor

To start the Editor in Access:

- Choose the Run Editor command from the Session menu.

Starting the Editor

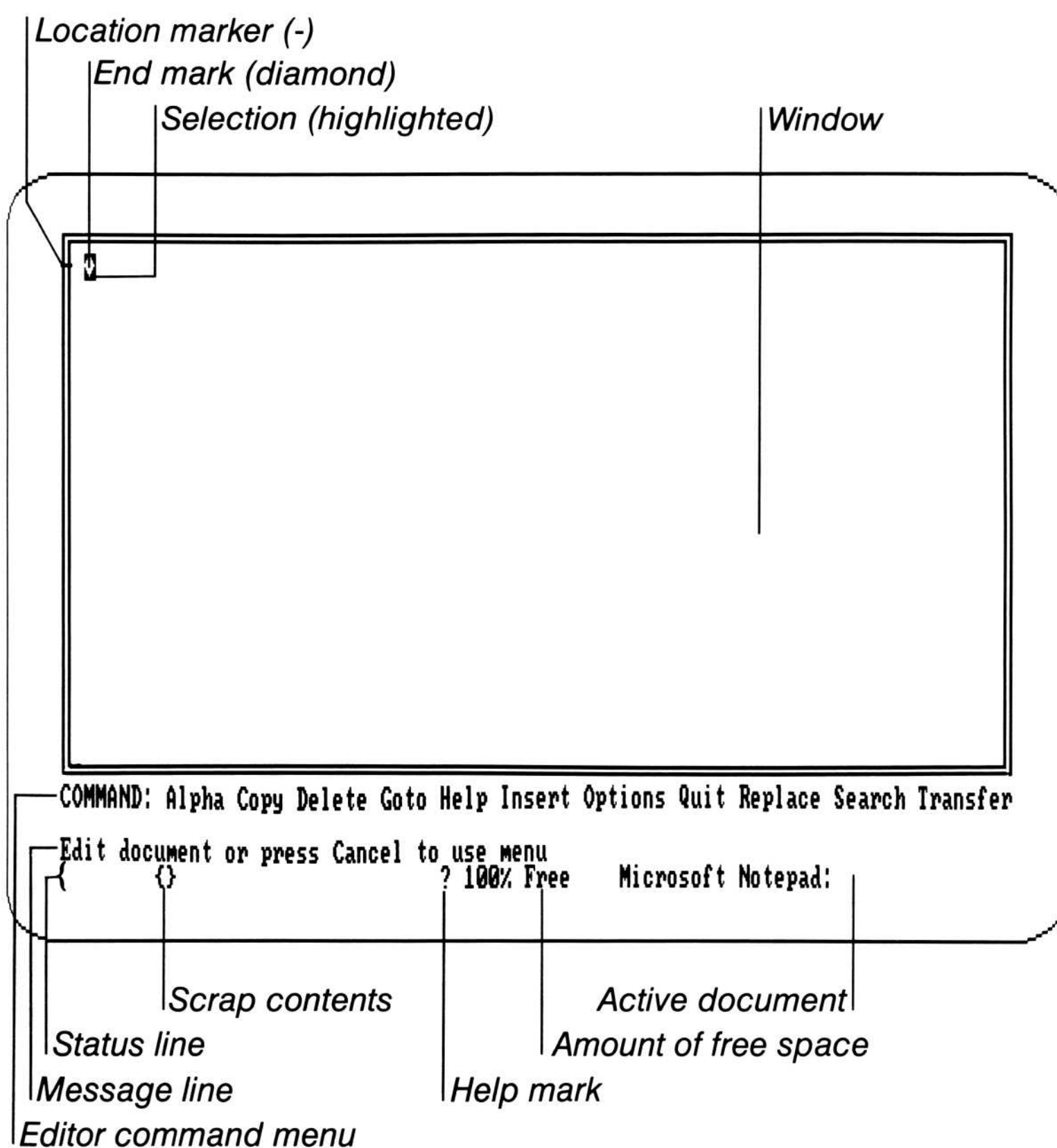
To start the Editor in the Access Mail program:

- 1 Choose the Compose command from the Mail main menu.
- 2 Choose the Create command from the Compose menu to start a new message.
- 3 Choose the Modify command from the Compose menu to edit drafts, replies, or addresses.

The Editor Screen

Editor screen

When you start the Editor with the Run Editor command, you see the Editor screen, composed of the window and the command area.



Entering Text

Entering text

Each letter, number, symbol, or punctuation character that you type is text, and is inserted in front of the selection. Remember to end each line with a carriage return.

If you want to:	Press:
Insert a single space	Spacebar
Start a new line	RETURN key
Choose commands using the keyboard	Esc
Insert a tab character	TAB key

A tab character expands to fill all the space up to the next tab stop. Tab stops are initially set every eight spaces.

After you've pressed the Esc key to choose a command, choose the Alpha command to type more text.

Selecting Text

Using either the keyboard or the mouse, you can select the text you want to edit. *Selecting* text means to highlight it on the screen. Once you have selected the text, you use the Editor commands and keys to perform actions, either on the selected text or at the place it marks.

Selecting Text with the Keyboard

Using the keyboard, you can select any character or sequence of characters. These remain selected until you delete them, insert text, or make another selection.

Selecting text with the keyboard

To select:	Do this:
The next character to the left, right, up, or down	<input type="checkbox"/> Press the appropriate direction key.
The first or last character in a line	<input type="checkbox"/> Press the Home or End key.
The first or last character in the window	<input type="checkbox"/> Press Ctrl-Home or Ctrl-End.

The first or last character in the document	■ Press Ctrl-PgUp or Ctrl-PgDn.
A string of characters	<div><div>1</div>Select the first character in the sequence.</div> <div><div>2</div>Press the EXTEND key (F6).</div> <div><div>3</div>Use the direction, PgUp, PgDn, Home, or End keys to select the last character in the sequence.</div> <div><div>4</div>Press the EXTEND key to stop extending the selection (optional).</div>

Selecting text with the mouse

Selecting Text with the Mouse

If you want to:	Do this:
Select a character	<div><div>1</div>Move the mouse pointer to the character you want.</div> <div><div>2</div>Click the left button.</div>

Editing Text

You use the editing keys to edit responses in command fields, and to delete, copy, or move selected text. You can also use the Delete, Copy, and Insert commands.

Deleting Text

To delete characters one by one

- Press the BACKSPACE key to delete the character to the left of the selection.

or

- Press the Del key to delete the selected character.

To delete a selection

- 1 Select the text you want to delete.

- 2 Use the Del key or the Delete command to delete the selected text and copy it to the scrap (replacing its previous contents).

or

Press SHIFT-Del to delete the selected text without copying it to the scrap.

To delete text

Copying Text

To copy text:

- 1 Select the text.
- 2 Use the Copy command to put a copy of the selection in the scrap and leave the selection intact.
- 3 Move the highlight to where you want the copy to appear.
- 4 Use the Insert command or the Ins key to insert the text from the scrap.

To copy text

The copy is inserted to the left of the highlight.

Moving Text

To move text

To move text:

- ❶ Select the text.
- ❷ Use the Delete command or the Del key to delete the selection and put it in the scrap.
- ❸ Move the highlight to where you want the copy to appear.
- ❹ Use the Insert command or the Ins key to insert the text from the scrap.

The copy is inserted to the left of the highlight.

To copy or move text to another file

To move text to another file:

- ❶ Select the text you want to move.
- ❷ Copy or delete the text to the scrap.
- ❸ Use the Transfer Load command to load the file you want the text copied or moved to.
- ❹ Move the highlight to where you want the copied text to appear.
- ❺ Use the Insert command or the Ins key to insert the text from the scrap.

The copy is inserted to the left of the highlight.

Working with Files

You create new files, or save changes to existing files, using the Transfer Save command. A file can contain one or more lines consisting of uppercase and lowercase letters, numbers, symbols, punctuation marks, spaces, and tabs. A line always ends with a carriage return, represented in the saved file by a carriage return and a linefeed.

The width of a line is the number of character spaces between its left and right margins. When you first start the Editor, the width is 77 characters, but you can set the width to any value from 1 to 32767 characters by changing the right margin (see the Options command in Chapter 20, “Session Menu and Phonebook Commands”).

The practical limit on the length of any file is the amount of space still available on the disk.

To view or edit a saved file, use the Transfer Load command.

Note If you started the Editor from the Mail program using the Compose command, do not use the Editor's Transfer commands to save or load files. When you are finished editing, use the Quit command to quit the Editor. Access will return you to Mail, and you can use the Transfer commands from the Mail menu to save or load your messages.

Saving Files

To save your text in a file:

- 1 Choose the Transfer Save command.
- 2 Type the filename you want the file to have.
- 3 Press the ENTER key.

The Editor saves the file on disk under the name you specified. The file remains on your screen so you can continue your work.

Loading Files

To load a file into the Editor:

- 1 Choose the Transfer Load command.
- 2 Type the filename of the file you want.
- 3 Press the ENTER key.

The Editor loads the file you chose, replacing the current file.

Quitting the Editor

When you are finished using the Editor:

- Choose the Quit command.

If you haven't saved the changes to your current file, the Editor will first ask you to confirm that you want to quit without saving the changes. Press Y to discard the changes. Press the CANCEL key to return to the Editor's main command menu.

If you have already saved your file, the Editor will simply ask you to confirm that you want to quit. Press Y to quit. Press the CANCEL key to return to the Editor's main command menu.

To save a file

To load a file

Quitting the Editor

Editor Commands

This section describes the Editor commands in alphabetical order. Each command description includes what you see after choosing the command, the purpose of the command, and other information you may need.

COMMAND: Alpha Copy Delete Goto Help Insert Options Quit Replace Search Transfer

Alpha

Alpha

Inserts text directly into the document as you type it.

The Editor starts with the Alpha command already active, so you can enter text immediately. The text you type is inserted to the left of the selection. Existing text is shifted to the right to make room.

When you have finished inserting text, press the Esc key to leave the Alpha command. You can then choose other commands. When you want to insert more text, choose the Alpha command again.

Copy

Copy

Copies selected text from the document to the scrap without deleting the text from the document.

Select the text you wish to copy before you choose the command. Any amount of text may be selected. When the text is copied, it replaces any text already in the scrap.

You can combine the Copy and Insert commands to copy selected text from one part of a document to another. First copy the selected text, then insert it at the desired location. You can combine the Copy, Transfer Load, and Insert commands to copy selected text from one document to another.

Delete

Deletes selected text from the document and places it in the scrap.

Select the text you want to delete before you choose the command. Any amount of text may be selected. When the text is copied to the scrap, it replaces any text already in the scrap.

You can combine the Delete and Insert commands to move selected text from one part of a document to another. First delete the selected text, then insert it at the desired location. You can combine the Delete, Transfer Load, and Insert commands to move selected text from one document to another.

Delete

Goto

GOTO LINE number: 

Goes to a specified line.

If the line you specify is not in the window, the Editor scrolls the document so you can see it.

Goto

Command Fields

number:

Type a line number from 1 to 32767. If you type a number greater than the number of lines in the document, the Editor selects the end mark. The proposed response is the current line number.

Help

HELP:  Resume Start Next Previous
Commands Editing Selection Keyboard

Displays the Editor Help file. The Help file provides information about the Editor keys and individual commands.

Help

To request information in the Help file, choose Help from the command menu, press the HELP key (Alt-h), or point the mouse pointer at the Help mark in the status line, then press and release the left button. When you request help, the window is replaced by text from the Help file, and the Help command menu appears.

To request information on a specific command, subcommand, command field, or error message:

- For a description of a command or subcommand, highlight the command in the menu, then press the HELP key (Alt-h).
- For a description of a command field, highlight the field, then press the HELP key.
- For a description of a command after an error occurs, press the HELP key immediately after the error message appears in the message line.

Within the Help file, you can request information by choosing options from the Help menu.

Insert

Insert

Copies all text in the scrap into the document.

This command inserts the text to the left of the current selection, shifting existing text to the right to make room. When inserting is complete, the command extends the selection over all characters in the inserted text, so you can see the amount of text inserted.

You can combine the Insert command with the Copy and Delete commands to copy and move text from one portion of a document to another. You can also combine these commands with the Transfer Load command to copy or move text from one document to another.

Options

Options

OPTIONS mute: Yes ☒ right margin: 77 tab width: 8

Presents a choice of options for the Editor operation.

This command controls the Editor's audible alarm, the column setting of the right margin, and the number of spaces between tab stops. Initially the alarm is on, the right margin is at column 77, and the tab width is 8 spaces.

Command Fields

mute:

Choose an option. "No" keeps the alarm on. "Yes" turns it off.

right margin:

Type a number from 1 to 32767. The proposed response is the current right margin position.

tab width:

Type a number from 1 to 32767. The proposed response is the current tab width.

Quit

Ends the current Editor session.

After you choose the command, the Editor asks you to confirm your wish to quit. Press Y to end the session. Press the Esc key to return to the Editor's main command menu.

The Quit command does not automatically save the current document. If you wish to save your work before leaving the Editor, use the Transfer Save command before you choose the Quit command. If you press Y and have not yet saved the document, the Editor asks you to confirm your wish to quit without saving the document. Press Y to end the session without saving the current document. Press the Esc key to return to the Editor's main command menu.

Quit

Replace

```
REPLACE text: █ with text:
        confirm:(Yes)No case:(Yes)No whole word:(Yes)No
```

Searches the document for the text in the "text" field and, when it is found, replaces it with the text in the "with text" field.

Replace

The direction of the search is always toward the end of the document. The starting and ending points of the search depend on the size and location of the current selection. If the selection is a single character, the search starts at the selection and goes until the end of the document. If the selection is more than one character, the search goes from the first to the last character in the selection. Only the text within the selection is searched.

If you choose confirmation, the Editor asks you to confirm the replacement. Press N to cancel the replacement and search for the next occurrence. Press the Esc key to cancel the command.

Command Fields

text:

Type the text you want to search for. It can be any sequence of letters, numbers, symbols, and punctuation up to 40 characters. Tab and carriage return characters are not permitted. The proposed response is the text of the last search or replacement.

with text:

Type the replacement text. It can be any sequence of letters, numbers, symbols, and punctuation up to 40 characters. Tab and carriage return characters are not permitted. The proposed response is the text of the last replacement.

confirm:

Choose “Yes” to make the Editor ask you to confirm before it replaces the text. Choose “No” to replace text without confirmation.

case:

Choose “Yes” to search for text that has exactly the same uppercase and lowercase letters as the search text and to replace this text with exactly what is typed in the “with text” field.

Choose “No” to ignore case when searching for the text. If any letters in the search text are uppercase, the Editor changes the replacement text so that it has the same uppercase and lowercase letters. For example, if “the” and “one” are the search and replacement text, then the Editor will replace “the” with “one,” “The” with “One,” and “THE” with “ONE.”

whole word:

Choose “Yes” to search for text that has leading and trailing word breaks (spaces, punctuation, etc.). Choose “No” to search for text anywhere, even embedded in other text.

Search

Search

```
SEARCH text: █  
direction: Up(Down) case:(Yes)No whole word:(Yes)No
```

Searches the document for the text in the “text” field and, when it is found, selects the text. The direction of the search and other information about the search are defined by the command fields described below.

Command Fields

text:

Type the text you want to search for. It can be any sequence of letters, numbers, symbols, and punctuation up to 40 characters. Tab and carriage return characters are not permitted. The proposed response is the text of the last search.

direction:

Choose “Up” to direct the search from the current selection toward the beginning of the document. Choose “Down” to direct the search from the current selection toward the end of the document.

case:

Choose “Yes” to search for text that has exactly the same uppercase and lowercase letters as the specified text. Choose “No” to ignore the distinction between uppercase and lowercase while searching.

whole word:

Choose “Yes” to search for text that has leading and trailing word breaks (spaces, punctuation, etc.). Choose “No” to search for text anywhere, even embedded in other text.

Transfer

Transfer

TRANSFER: **LOAD** Save Clear Delete Options Rename

Offers a choice of the following six subcommands, which affect the interaction of the Editor and the file system:

- Transfer Load loads a document from a disk into the Editor.
- Transfer Save saves a document in a file onto a disk.
- Transfer Clear clears the current document from the screen.
- Transfer Delete deletes the specified file from a disk.
- Transfer Options specifies which disk drive to use for data files.
- Transfer Rename renames the active file.

These subcommands are explained individually, in alphabetical order, on the following pages.

Most Transfer commands have a “filename” field in which you may supply the name of a file to be loaded, saved, deleted, or renamed. You can fill in a “filename” field by typing a response or by choosing a name from the directory.

Whenever the highlight is in the “filename” field, press the direction keys to view the directory of the current disk and choose the name of the document to be loaded.

To view all names in the directory, press any direction key when the “filename” field is empty. To view names that match a particular pattern, type the pattern, then press a direction key. To make a filename pattern, use the asterisk (*) and the question mark (?) in place of the characters in a name. The asterisk can replace several characters, the question mark only one. For example, the pattern “M*” displays all names that begin with the letter M, and the pattern “???” displays all names that are exactly three characters long.

To choose a document to load from the directory, use the direction keys to move the highlight to the desired name. The highlighted name also appears in the “filename” field.

Once you have chosen a name, use the TAB key to move to the next field, or press the ENTER key to carry out the command.

Transfer Clear

Clears the current document from the screen.

This command is useful if you wish to remove all text and start with an empty window. The command does not save the current version of the document, so if you choose the command before saving a document, the Editor asks you to confirm before proceeding.

Transfer Clear

Transfer Delete

TRANSFER DELETE filename: █

Deletes the specified file from a disk.

This command is useful whenever you need to make room for new files on a full disk. You can delete only files that have not been loaded or saved during the current editing session. If you attempt to delete any file that you have loaded or saved, the Editor cancels the command and displays an error message.

Transfer Delete

Command Field

filename:

Type a filename or use the direction keys to choose a filename. If you type a filename, type it exactly as it appears in the disk directory. If the file is not on the current drive, include the correct drive name.

Transfer Load

TRANSFER LOAD filename: █

read only: Yes(No)

Loads the specified file into the Editor's memory.

The Editor searches the disk for the specified file. If it finds the file, it loads the file from the disk. If the Editor cannot find the file, it asks if you want to create the file. Press Y to create the file. Press N to keep the current document and cancel the command.

Transfer Load

Use the “read only” field if you wish to view the document without changing it.

Command Fields

filename:

Type a filename or use the direction keys to choose a filename. If you type a filename, type it exactly as it appears in the disk directory. If the file is not on the current drive, include the correct drive name.

read only:

Choose “Yes” to load the document as a “read only” file, which means you can view the document, but cannot edit it. Choose “No” to load the document as an ordinary file, permitting changes and corrections.

Transfer Options

Transfer Options

TRANSFER OPTIONS setup: █

Sets the data drive to the specified drive.

This command is useful whenever you need to load and save many documents from the same disk. Once the data drive is set, you can refer to files on the disk in that drive without supplying a drive name.

Command Field

setup:

Type a drive name in the correct format. For example, *B:*

Transfer Rename

Transfer Rename

TRANSFER RENAME filename: █

Renames the active document.

This command changes the active document name in the status line to the specified name. If the active name is also the name of a file on the current disk, the command changes the name of the file as well. However, if you attempt to change the name to the name of a file that already exists on the current disk, the Editor cancels the command and displays an error message.

Command Field

filename:

Type a filename or use the direction keys to choose a filename.

Transfer Save

Transfer Save

TRANSFER SAVE filename: █

Saves the current document in a file on a disk.

Editor copies the current document to the specified file. After the copying is finished, you can continue to edit the document or load a new document.

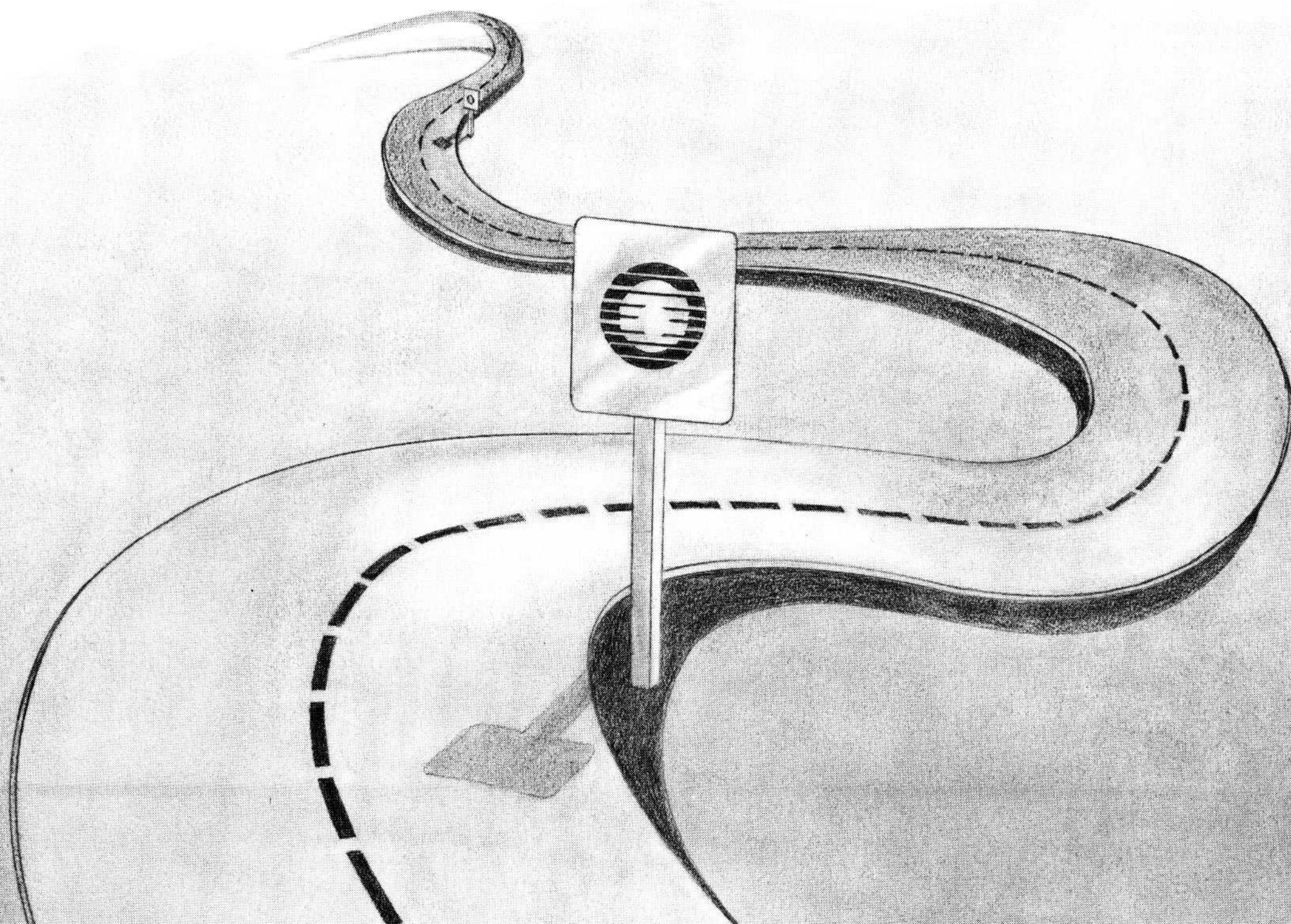
When you save a document in a file that already exists, Editor automatically creates a backup file by changing the extension of the original file to “.BAK” before saving the new document.

Command Field

filename:

Type a filename or use the direction keys to choose a filename. The proposed response is the current filename.

Reference

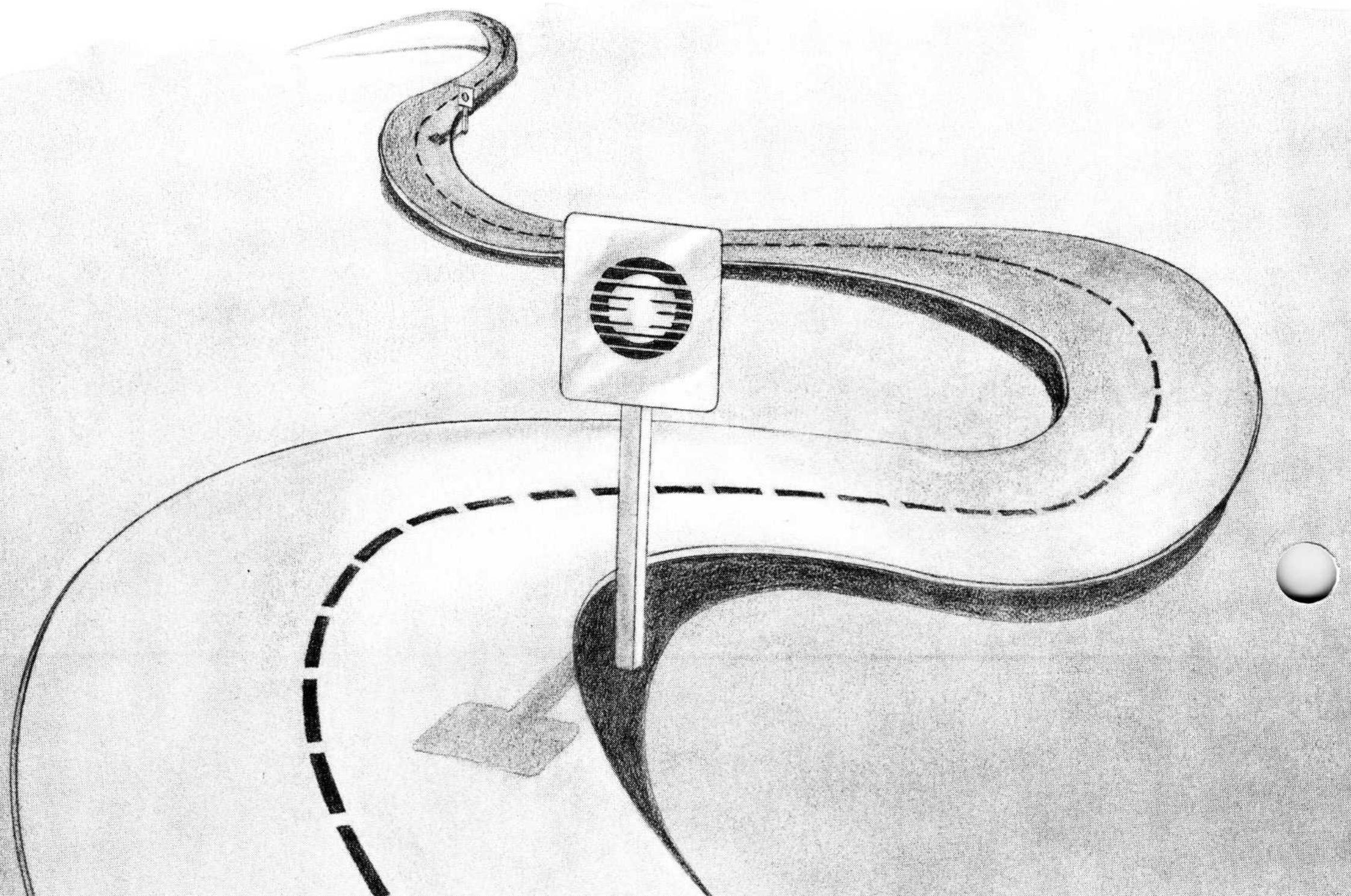


Reference

The three chapters in “Reference” provide detailed information on Microsoft Access commands and messages:

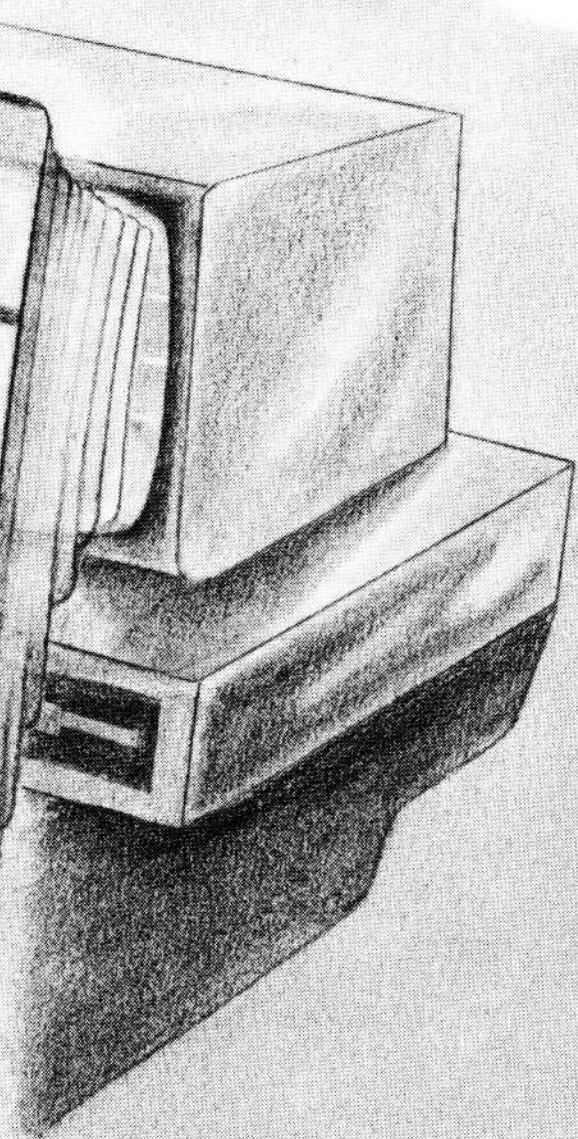
- Chapter 20, “Session Menu and Phonebook Commands,” describes commands from the Session and Phonebook menus.
- Chapter 21, “Microsoft Access Script Commands,” describes statements, functions, and system variables of the Microsoft Access Script Commands (MASC) language.
- Chapter 22, “Messages,” is an alphabetical list of messages that may appear on your screen, with their probable causes and recommended actions.

Appendixes A through E provide additional information to help you use Access.



NYSE: 26 5/8.... BFI Tradeline (r) Prices On 5/10/85 33.... BNY
 AMEX: 43 1/2.... BC 35.... BW
 LT 9 1/2.... CCT 3/4.... CEM 8 5/8.... CDC 9 1/8.... C
 NASDAQ
 ANDO 22 3/4.... ANDY 5 1/4.... APOG 9 3/8.... AAPL

STOCK	BID	ASKED	HIGH	LOW	LAST	VOL (100'S)
IMC	CLOSE	OPEN				
COI	128	127 7/8	129 1/4	127 3/4	128 3/4	7432
TAT	19 3/4	19 3/4	20 3/8	19 5/8	20 1/8	4463
MPR	28 3/4	29	29 1/2	28 3/4	29 1/2	2876
CCT	7 7/8	7 7/8	8 1/8	7 3/4	8	4414
SESSION	2 1/4	2 1/4	2 1/4	2 1/4	2 1/4	



20 Session Menu and Phonebook Commands

This chapter describes Microsoft Access commands from the Session and Phonebook menus. It explains the command area, and tells how to choose commands and fill in command fields. It also lists the commands and subcommands in alphabetical order, giving detailed information on their use.

The Access Screen

When you start Access for the first time, you see the beginning of the Install program. After that, you see this screen with the Session menu at the bottom.

Command lines


```

COMMAND: Answer Connect Disconnect Goto Help Learn Modify
           Options Phonebook Quit Run Transfer Window
Choose command or press command letter
SESSION                                     Access: OFFLINE L1W1
  
```

Status line

Message line

When you choose the Phonebook command from the Session menu, you see the Phonebook menu of commands.

```
COMMAND:  Delete Help Insert Modify  
Print Session Undo
```

Access menus

Access Menus

To tell Access what tasks to perform, you choose commands from the Session and Phonebook menus, the Editor menu, and the Custom Menus for the services. You choose commands and fill in command fields in the same way for all of these menus. See “Choosing Commands” below for details on choosing commands and filling in command fields.

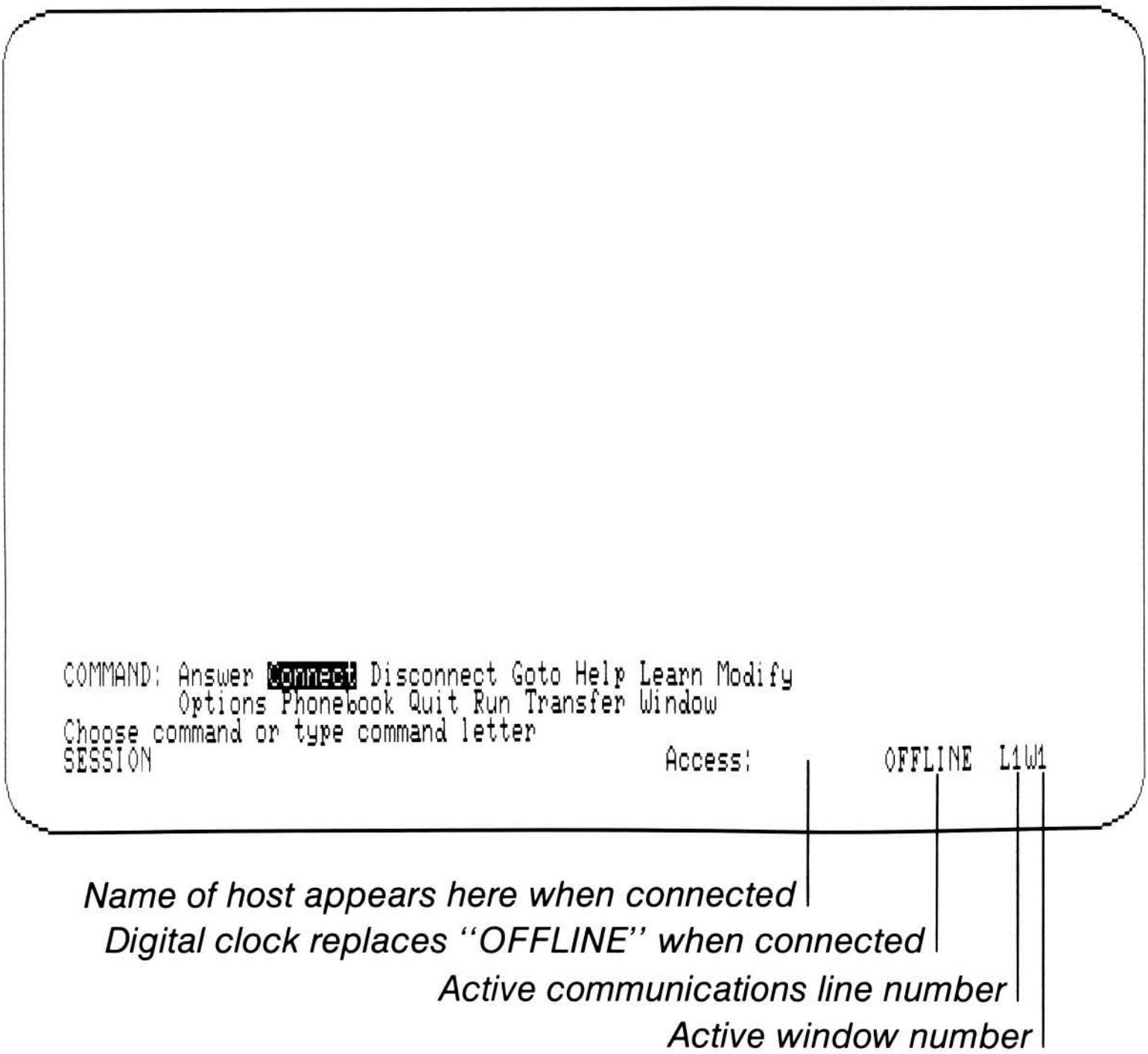
Menu	Explanation
Session	Contains commands you use for conducting your communications session. For example, Session menu commands connect and disconnect, save information, transfer files, and adjust communications settings.
Phonebook	Appears when you choose the Phonebook command from the Session menu. You use it to add, delete, or modify host information in the Phonebook, where Access stores host telephone numbers and settings.
Editor	Appears when you choose the Run Editor command from the Session menu. You use the Editor menu to create and edit files.
Custom	Appears when you connect to a host that has a Custom Menu.

The Editor commands are described in Chapter 19, “Using the Editor.” Custom Menu commands are described in “Using Custom Menus.”

The Command Area

The command area

The command areas for all of the menus are similar. The first two lines in the command area contain the menu. The rest of the command area gives you information to help you use Access.



Message Line The message line is the line just below the menu. Here you see prompts that indicate what to do next, or messages that describe actions or errors that may occur. See Chapter 22, “Messages,” for an alphabetical list of messages, their probable causes, and recommended actions.

The message line

Beneath the message line is the status line.

Status Line Above is the status line Access normally displays. You can see different kinds of information on the status line by pressing the STATUS key (F5). The status line tells you which command menu you are using — Session, Phonebook, Editor, or a specific Custom Menu. Or it may tell you that you are reviewing correspondence, using remote control, or using Install.

The status line

Additional information appears on the status line to tell you what function Access is currently performing.

Status line symbols

Symbol	Meaning
Key-X	Access is recording a Quickey.
Lrn	Access is learning.
Scr	Access is running a script file.
Cpt	Access is capturing.
Prn	Access is printing.
WAIT	Access is in a pause state.
XOFF	Replaces WAIT when Access has received an XOFF character from the host during XON/XOFF flow control. Access does not send data during pause or XOFF states.
EX	Extend Selection is on.
CL	Caps Lock is on.
NL	Numeric Lock is on (numeric keypad status).
SL	Scroll Lock is on (numeric keypad status).
Access	Program name.
HOSTNAME	Name of the current host.
OFFLINE	Access is offline.
00:00:00	Replaces OFFLINE when you are connected. Indicates connection time.
L1	Active communications line number.
W1	Active window number.

On the right side of the status line, you can see the name of the current host. Following the host name is the word *OFFLINE*, when you are not connected, or a digital clock. The clock counts down while you are connecting, and displays your connection time thereafter. The far right of the status line indicates which communications line and which window are active. For instance, you see *L1W1* when you are using communications line 1 and window 1.

Displaying different status lines with F5

When you run a script, you can press the STATUS key (F5) to see the script filename.

When you are capturing a file, you can press the STATUS key (F5) until you see the Capture filename and how many characters are currently in the capture file.

When Access is learning a procedure with the Learn command, you can press the STATUS key (F5) until you see the name of the Learn file.

To check the percent of memory available for carrying out Access commands and the amount of space available for storing review data, press the STATUS key (F5) until you see the required information. The amount of space for review data is in thousands of characters.

The amount of space for review may vary, depending on how much space Access itself needs. The Access program fills a fixed amount of memory. The remaining memory is divided into command memory and review memory.

Access uses the command memory to carry out commands. It reserves a fixed amount of command memory, but uses only what it needs.

Access uses review memory (sometimes called the review buffer) to store incoming data so you can review it later. If necessary, Access borrows free command memory to store review data. However, when this memory is needed to carry out commands, Access reclaims it. The review field in the status line indicates the total amount of space available for storing review data, including any free command memory.

Note When Access is in *REVIEW*, *Install*, or the Phonebook menu, you cannot use the STATUS key. The status line displays its messages in the 23 character positions following the command state.

To display function key definitions, press any of the following keys:

- LABEL key (F2)
- SHIFT-LABEL key (SHIFT-F2)
- Alt-LABEL key (Alt-F2)

For more information on the use of the function keys, see Appendix A, "The Keyboard."

Displaying function key definitions

Choosing commands

Choosing Commands

When a command menu is on the screen, you can choose a command.

To choose a command:

- Press the first letter of the name of the command. For example, press P to choose the Phonebook command.

or

- Press the spacebar (to move forward) or the BACKSPACE key (to move backward) to highlight the command. When the command is highlighted, press the ENTER key.

Some commands can be carried out immediately, some display a menu of subcommands, and some display command fields in which you supply information. For instance, if you choose the Modify command, the Session menu disappears and the following menu of subcommands appears.

```
MODIFY: Settings Quickeys
```

You can choose either Settings or Quickeys from the Modify subcommand menu.

If the command requires more information, command fields will appear:

- 1 Fill in the command fields with the necessary information, pressing the TAB key to move from field to field. An explanation of command fields appears in the following section, “Filling in Command Fields.”
- 2 Press the ENTER key to carry out the command.

Filling in Command Fields

Some commands require you to supply additional information in command fields. In the Connect command, for example, are the “to name,” “phone number,” “at speed,” “on comm line,” and “learn login” command fields:

```
CONNECT to name:  phone number:
          at speed: 300      on comm line: 1      learn login: Yes(No)
```


The first field is highlighted, or active, and ready for you to supply information. As you fill in a field, you can move to another field using the TAB and BACKTAB keys:

- Press the TAB key to move to the next command field.
- Press the BACKTAB key (SHIFT-TAB) to move to the previous command field.

You supply information in command fields by typing it in, choosing an option, or accepting a proposed response. In some cases, Access displays the most commonly used response as a proposed response. The “learn login” command field above is an example; “No” is the proposed response. To change the response:

- 1 Press the first letter of the response you want, or press the spacebar or BACKSPACE key to highlight it.
- 2 Press the TAB key to move to the next field, or the ENTER key to carry out the command.

In some command fields, the message asks you to enter a particular kind of information or “select from list.” When this phrase appears, you can display a list of possible responses by pressing any direction key (UP, DOWN, LEFT, or RIGHT). Then use the direction keys to highlight your choice. For example, in the “to name” field of the Connect command, you can use the direction keys to display your Phonebook entries and choose the entry for the host you want to connect to.

When a response is one you have typed in or chosen from a list, you can edit it. First, use the TAB and BACKTAB keys to highlight the response.

To replace a response, simply type in the replacement.

To delete a response, press the Del key.

To edit a response, press the CHARACTER RIGHT key (F10) or WORD RIGHT key (F8) to move the highlight onto the response. Then:

- To move the highlight to other characters so you can type over or delete them, use the CHARACTER LEFT key (F9) and CHARACTER RIGHT key (F10).
- To type over a character, move the highlight to the character, then type the new character.
- To delete the highlighted character, press the Del key.
- To delete the character to the left of the highlight, press the BACKSPACE key.
- To add to the response, move the highlight to the end of the response and type the additional characters.

Moving through command fields

Changing responses

Choosing from a list

Editing responses

Entering nondisplayable characters

To highlight the entire response again, press the WORD LEFT key (F7).

The following table shows how to indicate control characters or other nondisplayable characters when filling in command fields:

To indicate...	Type:	Explanation
Control character	^a...z	Caret (^) followed by uppercase or lowercase letter
Escape	^[Caret (^) followed by a bracket ([)
Character by its ASCII decimal value	^nnn	Caret (^) followed by a one-to three-digit number from 0 to 127
Carriage return		Bar character

To indicate a caret (^), type two carets (^).

Using wildcards in filenames

When entering a response in any command field requesting a filename, you can specify a wildcard or pattern and then press a direction key to display the files that match the pattern. You can choose a file by pressing any direction key to highlight it. See the Transfer command later in this chapter for information on specifying patterns.

Canceling commands

Canceling Commands

You can cancel a command at any time before you press the ENTER key. To cancel a command:

- Press the Esc key.

You can also cancel a command any time a message appears asking you to confirm a decision or make a choice. For example, when you choose Quit, a message asks you to press Y to confirm. You can press the Esc key to cancel the Quit command, instead of pressing Y.

Access Commands

Answer (Session menu)

Answer

```
ANSWER as name:  on comm line: 1
control: (Local)Remote
```

Answers a call and sets Access for local or remote control.

When you choose the Answer command, Access waits for a call, then answers it. If you are already connected, Access does not carry out the Answer command, but displays a message indicating it is already connected.

When Access answers the phone, control either stays with the computer running Access or goes to the remote computer making the call. If you choose “Local” in the “control” field, you control Access as usual after it answers the call. If you choose “Remote” in the “control” field, control of Access comes from the remote computer making the call. In this state, Access takes input from, and directs output to, the remote computer. To regain control from the remote computer, the local operator must press the Esc key.

If you want Access to request a password from remote users, you can specify a password in the “login password” command field of the Options command.

When Access disconnects a call it has answered in the remote state, it returns to the Answer command automatically, so it is ready to answer the next call.

You run Access from a remote machine almost the same way you run it from the local microcomputer. See Appendix A, “The Keyboard,” for information on remote terminal keys.

Command Fields

as name:

Type a name from the Phonebook if you want Access to use the associated settings. If the name has an associated .LGN file, Access

runs this script file upon connection. If you type a name that is not in the Phonebook, Access cannot carry out the command, and displays an error message. Leave the field blank if you want Access to use current communications settings.

on comm line:

Type the number of the communications line Access should use.

control:

Choose an option. To control Access from the local computer, choose "Local." To assign control to the remote computer making the call, choose "Remote."

Upon entering remote control (after password validation, if necessary) Access displays a modified Session menu:

```
COMMAND: Answer Connect Disconnect Goto Help Modify Run Transfer
```

In addition, the status line displays *REMOTE*.

This modified Session menu, which eliminates commands that are inappropriate for use with various remote terminals, provides for greater security.

Access can be controlled by a variety of remote terminals, including hard-copy terminals, lap-held computers, microcomputers and mainframes. In order to support these terminals, Access provides a simple command format. Instead of displaying the entire menu, Access prompts the remote caller with the command name. For example, the first prompt is:

```
COMMAND:
```

The remote user chooses commands as usual by pressing the first letter of the command. The remote user can press the question mark key (?) to see a list of available command choices.

Command fields appear one by one each time the remote user presses the TAB key. Only the proposed response for a field appears. The remote user can accept the proposed response, or change it by typing the correction or choosing another option.

Pressing the ENTER key carries out the command.

Connect (Session menu)

Connect

```
CONNECT to name: █      phone number:
      at speed: 300      on comm line: 1      learn login: Yes(No)
```

Connects you to another computer.

You use the Connect command to communicate with another computer via automatic-dial modem, acoustic coupler, or direct cable connection. See Appendix B, “Modems and Hardware,” for information on modems. If you are using an automatic-dial (smart) modem, dial a telephone number by entering the number in the “number” field and carrying out the command. If you are using a manual-dial modem (acoustic coupler), enter the number, then dial it when prompted. If you are connected to the host computer via direct cable, type *none* in the “number” field.

After you carry out the Connect command, if you are using an automatic-dial modem, a digital clock display appears in the status line and counts down the seconds until Access connects to the host. If Access fails to connect in 60 seconds (if the line is busy, for example), the Session menu appears and you can try again. If Access fails to connect and you are using an acoustic coupler, hang up and try again.

When you connect successfully, the command lines vanish, leaving a blank display window above the status line. The status line displays the host name, and the digital clock monitors your online time in hours, minutes, and seconds.

You can now communicate with the host. If Access has stored a login file for the host, it will log in automatically. Otherwise, you log in as usual.

As characters from the keyboard or the communications line fill the display window, the top lines scroll off the screen automatically. Press the PAUSE ON/OFF key (F9) to temporarily halt correspondence, freezing the display; to resume correspondence, press F9 again. To ensure that characters are not lost while Access is in the pause state, see the Modify Setting command for information on setting XON/XOFF flow control.

Access stores information that has scrolled off the display window in a special storage area in memory. You can review this information by pressing any direction key. Once in review, you can use any of the review keys listed in Appendix A, “The Keyboard.” Because Access correspondence has now paused, press F9 to resume communications.

To use the Session menu and choose Access commands, press the MENU key (F10). To continue your session, choose the Connect command again; Access does not display the Connect command fields.

Command Fields

to name:

Type the name of the intended host, using one to eight characters. If the name is in the Phonebook, you can choose a name by pressing any direction key. Access then uses the telephone number, login script file and communications settings associated with the host entry. (See the Phonebook command for more information on the Phonebook.)

If you type a new host name, Access uses current communications settings. (See the Modify Settings command for more information on communications settings.) When you carry out the Connect command, Access asks if it should store the new name, along with current settings, in the Phonebook; press Y for Yes or N for No.

Leave this field blank if you want Access to simply dial a number using current communications settings.

phone number:

Type the telephone number of the intended host.

If you are connected directly to a host via cable, type *none*

You can also type *none* when you want to communicate with the modem.

If you are using voice communications and want to force a data connection, type *originate*. If the other computer is running Access, the other operator should type *answer* in this command field. You can abbreviate these words to as few as four letters. For information about filling in this field for X.PC connections, see Appendix D, "Using X.PC Connections."

at speed:

Type the speed or baud rate, or select from a list of speeds by pressing any direction key. The response should agree with the host speed and be compatible with your modem.

on comm line:

Type the number of the communications line you want to use. If you are using X.PC channels, type the line number followed by a decimal point and a channel number. Channels are numbered from 1 to 15. See Appendix D, "Using X.PC Connections," for more information.

learn login:

Choose whether Access should learn the login sequence of the associated host. If you choose “Yes” and log in to the host computer, Access will record the login sequence in a script file with the extension .LGN, providing you have filled in the “to name” field. When you have finished logging in, use the Learn command to instruct Access to stop learning. During subsequent connections with the associated host, Access uses this file to log in automatically.

Note Access records your password in this file, so you may want to consider your security requirements before using this capability.

Copy (Phonebook menu)

Copy

Places a copy of a Phonebook entry in the scrap.

Use the Copy command to copy information from a Phonebook entry for use elsewhere in the Phonebook. Before choosing the Copy command, choose the Phonebook entry you want to copy by pressing any direction key. When you choose the Copy command, Access copies the selected entry to scrap, replacing any previously scrapped entry. The current scrapped entry appears in the status line between braces. You can retrieve the scrapped entry and position it before a selected entry using the Insert command. However, every Phonebook entry must have a unique host computer name, so rename one of the copies using the Modify Settings command.

Delete (Phonebook menu)

Delete

Removes a Phonebook entry and places it in the scrap.

Use the Delete command to move or delete a Phonebook entry. Before you choose the Delete command, select the Phonebook entry you want to delete by pressing any direction key. When you choose the Delete command, Access moves the selected entry to the scrap, replacing any previously scrapped entry. The current scrapped entry appears in the status line between braces. You can retrieve the scrapped entry and reposition it using the Insert command. Access deletes the contents of the scrap permanently when you choose the Session command to leave the Phonebook.

Disconnect

Disconnect (Session menu)

```
DISCONNECT comm line: █
```

Disconnects the communications line.

Use the Disconnect command to disconnect a specific communications line, equivalent to hanging up the phone or terminating a direct cable connection. If you are using multiple lines, you must disconnect each line explicitly.

If you are using a manual-dial modem (acoustic coupler), Access prompts you to hang up the phone.

Command Field**comm line:**

Type the number of the communications line you want to disconnect. The proposed response is the current active line. Access asks you to confirm your decision to disconnect the line. Press Y to confirm your decision, or press N to remain connected.

Goto

Goto (Session menu)

```
GOTO comm line: █ in window number: 1
```

Changes the active communications line, assigns the line to a different window, or both.

When you carry out the Goto command, Access activates the communications line and window you specify; correspondence from the specified communications line appears in the specified window. The current active communications line and window numbers appear in the status line after the letters *L* and *W*.

Command Fields**comm line:**

Type the number of a communications line. The proposed response is the number of the current active line.

If you are using X.PC channels, type the line number followed by a decimal point and a channel number. Channels are numbered from 1 to 15. See Appendix D, “Using X.PC Connections,” for more information.

in window number:

Type the window number of one of the windows on your screen. This window displays correspondence from the specified communications line. The proposed response is the number of the active window.

Help (Session and Phonebook menus)

Help

```
HELP: Resume Next Previous
      Introduction Applications Commands Keyboard
```

Displays information about running Access.

You can view the Help text in two ways: by choosing the Help command from the Session menu or by pressing Alt-h when you are using a command or command field. When you choose the Help command from the menu, Access displays the beginning of the Help text. You can choose the Help command from either the Session menu or the Phonebook menu.

When you request help, the Help text replaces the current screen display. To return to where you were before you requested help, choose the Resume command. To return to the main Session menu or the Phonebook menu, press the Esc key.

Once in the Help text, you can move to different parts of the text by choosing subcommands from the Help menu.

Insert (Phonebook menu)

Insert

```
INSERT name: [ ] description:
      number: use settings: Current(Default)
```

Inserts a new entry or an entry from the scrap into the Phonebook.

Use the Insert command to add new entries to the Phonebook or to retrieve entries that you placed in the scrap with the Copy or Delete commands. First, select the entry that you want the inserted entry to precede by pressing any direction key. Then, choose the Insert command. If you are inserting a new entry, fill in the Insert command fields and press the ENTER key. If you are inserting an entry from the scrap, braces appear in the “name” field and you simply press the ENTER key. Access inserts the entry in the Phonebook above the selected entry.

Command Fields

name:

Type the name of the new host, using up to eight characters. If you have placed an entry in the scrap, braces appear in this field, indicating you can insert the current scrapped entry by pressing the ENTER key.

description:

(Optional) Type a description of the host that will help identify it. For example, you could type the full name of the host computer here, since the response in the “name” field is limited to eight characters.

number:

Type the telephone number of the new host or type *none* for direct connection.

use settings:

Choose whether Access should store the current communications settings or the original default settings for the new host computer entry. You can change specific settings using the Modify Settings command from the Phonebook menu.

Learn

Learn (Session menu)

```
LEARN script filename: ■          action:(Open)Close
```

Instructs Access to record a sequence of actions in a script file.

Use the Learn command to record a command sequence in a script file. This capability lets you automate your communications sessions. Sequences can include Access commands or interactions with the host. For example, you can connect to a host, log in,

transfer a file, log off, and disconnect, and Access will record the entire procedure. Then, when you run this script file using the Run command, Access performs the procedure automatically.

Access can “learn” the following commands:

Answer

Connect

Disconnect

Goto

All Run commands

Transfer commands (except Transfer View)

Window Split

Window Close

Window Options (“borders” and “paint” command fields only)

CAPTURE ON/OFF key

PRINT ON/OFF key

NEXT WINDOW key

NEXT COMMLINE key

BREAK key

Access stores the learned sequences as script files. You can also build script files using any text editor and the script command language. See Chapter 18, “Writing Scripts,” and Chapter 21, “Microsoft Access Script Commands,” for more information on writing and running a script file.

When you are finished recording, remember to close the file before you attempt to use it.

Command Fields

script filename:

Type a filename. Access supplies the extension .SCR automatically, unless you specify an extension.

action:

Choose an option. If you are opening a new Learn script file, the default is “Open.” If the file is already open, the default is “Close.”

Modify

Modify (Session and Phonebook menus)

MODIFY: ~~Settings~~ Quickeys

Modifies communications settings and assigns multiple characters to a single Quickey.

Use the Modify commands to specify or change communications settings and Quickey assignments. You can choose these commands from either the Session menu or the Phonebook menu. When modifying in the Phonebook, first select the Phonebook entry you want to modify by pressing any direction key.

The following pages describe the Modify Settings and Modify Quickeys commands.

Modify Quickeys

Modify Quickeys (Session and Phonebook menus)

MODIFY QUICKKEY letter: █ text:

Automates keyboard functions during your session by assigning multiple characters to a single Quickey.

Use the Modify Quickeys command to assign a string of keystrokes, such as an often-used host command, to a specific Quickey. Whenever you want to use a Quickey while you are communicating with a host, press the Alt key while pressing the Quickey letter, and Access sends the series of characters just as if you had typed the string from the keyboard. Each host in the Phonebook can have its own set of Quickeys.

Instead of using the Modify Quickeys command, you can instruct Access to record the string as you type it by pressing the RECORD ON/OFF key (F7). When prompted, type the Quickey letter and Access will record subsequent keystrokes (up to 255). To instruct Access to stop recording, press F7 again or return to the Session menu by pressing the MENU key (F10).

You can choose the Modify Quickeys command from either the Session menu or the Phonebook menu. Modifying Quickeys from the Phonebook affects a specific host entry, rather than the connected host Quickeys. When working from the Phonebook menu, select the entry you want to contain the Quickey assignment by pressing any direction key.

Access asks if it should save any changes you make in these command fields when:

- You modify Quickeys for a host with which you were connected or a host from the Phonebook, then choose the Quit command.
- You modify Quickeys from the Phonebook menu, then choose the Session command.
- You modify Quickeys from the Phonebook menu, but do not save them, then choose the Quit command.

Command Fields

letter:

Type a letter from A to Z or select from a list of possible responses by pressing any direction key.

text:

Type the text string you want the Quickey to represent. The string can be up to 255 characters long. To indicate control and other nondisplayable characters, see the section on filling in command fields in the beginning of this chapter.

Modify Settings
(Session and Phonebook menus)

Modify Settings

			<i>Phonebook menu only</i>
MODIFY SETTINGS	name:	description:	
	number:		
	speed: 1200		duplex: Full(Half)
	word length: 7(8)		parity: Even Odd Mark Space(None)
	stop bits:(1)2		terminal: VT100 VT52(TTY)Debug
	XON/XOFF:(Yes)No		
	prompt character:		end-of-line character:
	prompt count: 0		prompt timeout: 0
	expand tabs: Yes(No)		pad blank lines: Yes(No)
	filter input:(Yes)No		add to input EOL: None CR(LF)
	auto disconnect time: 0		remove output file linefeeds:(Yes)No

Specifies host communications settings.

The Modify Settings command is among the most important Access commands because it lets you tailor a communications session to your specific needs and conditions. Use this command to review or change communications settings. You can choose the Modify Settings command from either the Session menu or the Phonebook menu.

The Modify Settings command in the Phonebook menu includes three additional command fields — the “name,” “number,” and “description” fields — with which you can specify settings for a specific host entry rather than for the current session. Select the host entry by pressing any direction key.

Each of the specifications in the Modify Settings command fields must agree with the communications settings of the host. Otherwise, you will not be able to communicate successfully. Therefore, you should have the host communications settings on hand and set Access accordingly.

Access asks if it should save any changes you make in these command fields when:

- You modify settings for a host with which you are connected, then choose the Quit command.
- You modify settings from the Phonebook menu, then choose the Session command.
- You modify settings from the Phonebook menu, but do not save them, then choose the Quit command.

Command Fields

name: (Phonebook only)

This field displays the host computer name from the selected Phonebook entry. To rename an entry, type a new name, using one to eight characters.

description: (Phonebook only)

This field displays the host computer description (if any) from the selected Phonebook entry. To change it, type a new description.

number: (Phonebook only)

This field displays the host computer telephone number from the selected Phonebook entry. To change it, type a new host computer telephone number.

speed:

Type the speed (baud rate) appropriate for the intended host and your modem. For most modems, enter 300 or 1200. You can select from a list of possible responses by pressing any direction key.

duplex:

Choose an option. During full duplex operation, Access sends the characters you type to the host computer, which echoes them back to your screen.

During half duplex operation, Access sends the characters you type to the host computer and displays them on your screen.

During local operation, Access displays on your screen the characters you type but does not send them to a host; nor does Access display incoming characters.

word length:

Choose an option. Word length refers to the number of bits that describe a character. Some computers use 8 bits to describe a character. Others use 7 bits plus a parity bit. This packet of bits is called a *byte*. If you choose “None” in the “parity” field, choose “8” in this field. A word length of “8” and parity of “None” is acceptable to most hosts.

parity:

Choose an option. “Parity” refers to an error-checking bit associated with each 7-bit character. The receiving computer compares the information in this bit with the character it received. A discrepancy indicates an error. Access alerts you to a parity error by displaying an asterisk (*) on your screen.

“Even” parity means the number of 1s in a word must be even. If the number is odd, the parity bit is set to 1 for that word; if the number is even, the parity bit is set to 0.

“Odd” parity means the number of 1s in a word must be odd. If the number is even, the parity bit is set to 1 for that word; if the number is odd, the parity bit is set to 0.

“Mark” parity means the parity bit is always 1.

“Space” parity means the parity bit is always 0.

“None” means that no parity bit is used. Therefore, choose “8” in the “word length” field.

stop bits:

Choose “1” or “2.” One start bit and one or two stop bits frame the bit packet describing a character.

terminal:

Choose an option. “Terminal” refers to the type of terminal you want your microcomputer to emulate. When your microcomputer emulates an intelligent terminal, such as a VT100 or VT52, it recognizes the control sequences of the specific terminal type. These sequences control screen display and other terminal functions. Many mainframe computers provide special programming capabilities that depend on these control sequences.

“VT100” means that Access recognizes the ANSI-VT100 control sequences. “VT52” means that Access recognizes the VT52 control sequences.

“TTY” means that the only control characters Access recognizes are carriage return, linefeed, formfeed, backspace, vertical and horizontal tabs, bell, and control-E (answerback request).

“Debug” means that Access displays every character on the screen, without interpreting any as control characters. If your computer does not seem to respond properly to commands sent from the host, the “Debug” terminal type lets you see exactly what data and control sequences the computer is receiving. Non-displayable characters appear as ASCII decimal numbers within brackets ([]).

XON/XOFF:

Choose an option. A response of “Yes,” appropriate for many computers, means that Access sends and responds to XON/XOFF characters to control data transmission.

Note The host must also support XON/XOFF flow control.

XON/XOFF is a form of data flow control which uses special control characters to signal transmission starts and stops and minimize data loss. Data flow-control settings prevent transmission from exceeding the capacity of the built-in buffers that temporarily store data waiting for processing. With XON/XOFF flow control, the receiving computer sends an XOFF character to the sending computer, temporarily halting data transmission when the communications buffer approaches capacity. The receiving computer sends an XON character when it is ready to receive more data.

Note The next four command fields concern the use of end-of-line characters and prompt settings to pace transmissions during nonprotocol file sending. Pacing is necessary because some host computers process data one line at a time, waiting until their communications buffers receive a line of characters before processing data. Both computers must recognize the same pacing conventions.

Access offers several forms of line pacing. Each requires you to specify an end-of-line character for use during file sending. After Access sends this character marking the end of a line of data, it waits for a host computer prompt before sending the next line of data. The prompt may be a specific character, or, if you do not specify a prompt character, it can be a count. A prompt count is a specific number of characters that prompts Access to send the next line of data. If you do not specify a prompt character or count, Access can use a prompt timeout setting. This instructs Access to wait a specific number of seconds before sending the next line of data. If you specify only an end-of-line character and set the prompt fields to 0 or leave them blank, Access waits for you to press the PAUSE ON/OFF key (F9) to send the next line of data.

prompt character:

Type the host's prompt character. After Access sends an end-of-line character, it waits to receive this prompt character before sending the next line of data from the file.

end-of-line character:

Type the host's end-of-line character. After Access sends this character, marking the end of a line of data, it waits for a host prompt before sending the next line of data. Most hosts use a carriage return as the end-of-line character. Indicate a carriage return with the bar character (|). To indicate other nondisplayable characters, see the section on filling in command fields in the beginning of this chapter.

prompt count:

Type a number or the letter *L* for Learn. If you type a number, after Access sends the end-of-line character, it waits to receive the specified number of characters from the host as a prompt to send the next line of data.

If you type *L* for Learn, after Access sends the first line of data, it counts the number of characters it receives from the host. *WAIT* appears in the status line. When the host prompt characters appear, indicating it is ready to receive the next line of data, press

the PAUSE ON/OFF key (F9). When you do this, Access records the count and uses it for subsequent sending.

prompt timeout:

Type a number. After Access sends an end-of-line character, it waits the specified timeout (in seconds) before sending the next line of data.

Even if you specify a prompt character or count, Access will proceed after the specified timeout, regardless of whether the prompt characters have appeared.

expand tabs:

Choose an option. If you choose “Yes,” Access changes tab characters into spaces when it sends a file. This specification is available because some computers do not allow tab characters in text files.

pad blank lines:

Choose an option. If you choose “Yes,” Access inserts a space before any empty lines when it sends a file. This specification is available because some editors interpret a carriage return on a blank line (to indicate a skipped line) as the end of text input mode.

filter input:

Choose an option. If you choose “Yes,” Access removes non-displayable characters from incoming data.

add to input EOL:

Choose an option. If you choose “none,” Access does not insert carriage returns or linefeeds (indicating end-of-line) in incoming correspondence. If you choose “CR,” Access inserts a carriage return when it receives a linefeed from incoming correspondence. If you choose “LF,” Access inserts a linefeed when it receives a carriage return.

auto disconnect time:

This field lets you instruct Access to disconnect automatically after a specified amount of time has passed without communications activity. Type the number of minutes Access should wait before automatically disconnecting. A response of 0 means Access will not disconnect until you instruct it to do so.

remove output file linefeeds:

Choose an option. If you choose “Yes,” Access removes linefeeds from carriage return/linefeed pairs when it sends a file.

Options (Session menu)

Options

```

OPTIONS phone: None Pulse    dial prefix:    modem name:
modem setup:    dial command:  dial postfix:
printer setup:  mute: Yes(No)  control:(Local)Remote
answerback:    login password:
  
```

Specifies your hardware, remote control, and answerback settings.

Use the Options command to describe your communications equipment for the active communications line. You need specify this information only once for each communications line, the first time you use a particular phone, modem, or printer. Access then saves the responses and uses them during future communications sessions.

You can connect using a smart (automatic-dial) modem, an acoustic coupler (manual-dial), or a direct cable connection, depending on your response in the “modem name” field.

Command Fields

phone:

Choose an option. If you are using a touch-tone phone line, choose “Tone”; if you are using a rotary-dial phone line, choose “Pulse.”

dial prefix:

Type the number (such as 9) that you dial to access an outside line if you are connected to a private branch exchange (PBX) system. Some telephone systems require a pause after the dial prefix to wait for a second dial tone, and your modem may recognize a pause or delay character (such as a comma). See Appendix B, “Modems and Hardware,” for more information. Or, see your modem manual. Type the appropriate pause character, if any, after the prefix. For example, the appropriate pause character for the Hayes Smartmodem would be , (a comma).

modem name:

Type your modem name or select from a list by pressing any direction key. If your modem name appears, or is compatible with one that appears, select that name; Access supplies the information in the next three modem settings fields. If your modem does not appear or is not compatible with one that appears, type *other* and supply the appropriate information in the modem settings fields. See your modem manual and Appendix B, “Modems and Hardware,” for information. If you are using an acoustic coupler,

type *acoustic* and ignore the modem settings fields. If you are connected directly to a host computer via cable, type *none* in the field, and ignore the modem settings fields.

Note To indicate nondisplayable characters in the next three fields, see the section on filling in command fields in the beginning of this chapter. To specify a one-second wait, type a backslash (\).

modem setup:

Type the appropriate setup string for your modem. Access uses this string to reset your modem in preparation for making or answering a call.

dial command:

Type the command instructing your modem to dial a telephone number.

dial postfix:

Type the appropriate postfix for your modem, usually the bar character (|) indicating a carriage return. Access sends a dial string consisting of, first, the modem setup string, then the dial command, dial prefix, telephone number, and last, the dial postfix.

printer setup:

Type one of the following printer device designations (including the colon):

LPT1:

LPT2:

LPT3:

COM1:

COM2:

You can follow the device designation with any special characters the printer needs to set print mode (such as boldface or italic). To indicate nondisplayable characters, see the section on filling in command fields in the beginning of this chapter. Access uses the string in this field to initialize your printer the first time you print.

mute:

Choose an option. If you choose “Yes,” Access turns off the audible alarm.

control:

Choose whether Access should accept control from your local computer or from a remote computer. You can change the response in this field only after you are connected, if you want to redirect control from one machine to the other. For more information on remote control of Access, see the Answer command.

answerback:

Type the response to a “who are you” query from the host. This field is optional. If you fill it in, Access automatically sends the response to the host upon receiving the query.

login password:

Type a password if you want Access to require a password when a remote user calls in.

Phonebook (Session menu)

Phonebook

```
COMMAND: [key] Delete Help Insert Modify
          Print Session Undo
```

Provides commands for you to view or change Phonebook entries. When you choose Phonebook, the Phonebook menu replaces the Session menu. A bordered display of your Phonebook entries appears above the Phonebook menu, replacing the current screen display. Each entry includes the host name and description, telephone number, and baud rate. Access stores a complete set of communications settings and Quickeys for each entry. Use the Modify command to see this additional information. Choose the Session command to return to the Session menu. Phonebook entries appear in the following format:

Phonebook entry number			
	Name of host computer		
	Description of host computer (optional)		
1	HOSTNAME	Full Hostname.....	1-555-555-9999 <1200>
		Phone number of host computer	Speed

A file position indicator (-) on the left border shows you the location of the first entry on the screen relative to the beginning and end of the Phonebook file. A position near the top indicates the beginning of the file; a position near the bottom indicates the end.

Print

Print (Phonebook menu)

PRINT: **Printer** File

Prints a version of the Phonebook or saves a version in a file.

You use the Print command to route a version of the Phonebook to the printer or to a file. The following pages describe the Print File and Print Printer commands.

Print File

Print File (Phonebook menu)

PRINT FILE filename: ■ format:(Table)Detail

Saves a printable version of the Access Phonebook to a file.

You use the Print File command to instruct Access to route a printable version of your Phonebook to disk and save it under a specific filename. Access lets you choose between two formats for the file. You can then print files from a microcomputer that has a printer, if your machine does not have one.

Command Fields

filename:

Type a filename.

format:

Choose an option. If you choose "Table," Access uses the format of the Phonebook screen. If you choose "Detail," Access generates a page for each entry, showing the settings in the Modify Settings command field format, along with the Quickey assignments.

Print Printer (Phonebook menu)

Print Printer

PRINT PRINTER format: **TABLE** Detail

Prints a version of the Access Phonebook.

Use the Print Printer command to print your Phonebook. You can choose between two formats for the printout.

Choose an option. If you choose “Table,” Access prints the Phonebook in the format of the Phonebook screen. If you choose “Detail,” Access prints a page for each entry, showing the settings in the Modify Settings command field format, along with Quickey assignments.

Quit (Session menu)

Quit

Ends a communications session.

Choose the Quit command to leave Access. Access asks you to confirm your decision to quit. Press Y to confirm, or press the Esc key to return to the Session menu.

If you try to carry out the Quit command while you are still connected to a host computer, Access asks if you want to disconnect. Press Y to disconnect or press N to remain connected after you quit Access.

If you have modified settings or Quickeys for a connected host or from the Phonebook menu, Access asks if it should save these settings in the Phonebook. Press Y to save the changed settings in the Phonebook or press N to discard the changes.

Access also closes all open files.

Run (Session menu)

Run

RUN: **Script** Editor Program

Runs a script file, editor or other program.

The Run commands instruct Access to process the specified program file.

Command Field

filename:

Type the name of the script file or select from a list of filenames by pressing any direction key. If you do not specify a filename extension, Access uses .SCR.

Run Editor

Run Editor (Session menu)

Starts the Editor to edit script and other text files.

Access provides you with the Editor, an adaptation of Microsoft Notepad. See Chapter 19, “Using the Editor,” for information on how the Editor works.

Note When you use the Run Editor command, Access erases the contents of the review buffer to provide memory space for the Editor Program. See the introduction to this chapter for more information on the review buffer.

Also, COMMAND.COM must be present on the disk or in the directory from which you start Access.

Run Program

Run Program (Session menu)

RUN PROGRAM name: █

Starts a program.

The Disk Operating System runs the specified program or DOS command when you carry out the Run command. Upon completion of the program, the system returns you to the Access Session menu.

Note When you use the Run Program command, Access erases the contents of the review buffer to provide memory space for the program you are running. See the introduction to this chapter for more information on the review buffer.

Also, COMMAND.COM must be present on the disk or in the directory from which you start Access.

Command Field

name:

Type the DOS command or name of the program, or select from a list of filenames by pressing any direction key.

Run Script (Session menu)

Run Script

RUN SCRIPT filename: █

Starts script file processing.

A script file contains a series of script commands. Access already has script files for major information and mail services. (See “Using Custom Menus” for information on service menus.)

You can write your own script program files using the Run Editor command (or any text editor) and the script language. See Chapter 18, “Writing Scripts,” and Chapter 21, “Microsoft Access Script Commands,” for more information on writing and running a script file.

To stop script file processing, press the Esc key twice. Access asks you to confirm your decision. Press Y to confirm or press N to continue script processing.

Session (Phonebook menu)

Session

Use this command to return to the Session menu and continue a communications session.

Choose the Session command to leave the Phonebook menu and use the Session menu. When you choose Session, Access asks if it should permanently save any changes you made in the Phonebook. Press Y for “Yes” or N for “No.”

Transfer (Session menu)

Transfer

TRANSFER: **Transfer** Send Options Delete Rename View Protocol

Provides file transfer and file directory maintenance capabilities.

Use to transfer files, with or without error-checking protocol, to delete a file, rename a file, view a file or directory, or change the default disk drive.

Most Transfer commands have a “filename” field in which you supply the name of a file by typing it or by selecting it from the directory. When typing a filename, use the standard format of your Disk Operating System. See your system manual for guidelines.

The following pages describe the Transfer subcommands.

Transfer Capture

Transfer Capture (Session menu)

TRANSFER CAPTURE to filename: **■** action:(Open)Close

Saves a communications session permanently on disk.

You use the Transfer Capture command to capture or save information on disk, using a specific filename. To stop and then resume capturing, use the CAPTURE ON/OFF key (F3).

Access provides you with a file called TEMP, where you can save data without using the Transfer Capture command. Press the CAPTURE ON/OFF key (F3) to start and stop capturing to the TEMP file. Access appends information to this file whenever you press the CAPTURE key on, unless you close the file and rename it using the Transfer Capture and Transfer Rename commands. Renaming the TEMP file, in effect, moves the contents of the TEMP file to the uniquely named file, leaving TEMP empty until you capture to it again.

To capture correspondence that has scrolled off the display window, use the selection keys. See Chapter 3, “Conducting Communications Sessions,” for information on capturing earlier correspondence.

Command Fields

to filename:

Type a filename. If you type an existing filename, Access asks if you want to overwrite or append to the existing file when you carry out the command. Press O to overwrite the existing file or press A to append to it.

action:

Choose an option. The proposed response is always the opposite of the current condition. If you have opened a file, the proposed response is “Close”; if you have not opened a file, the proposed response is “Open.”

Transfer Delete (Session menu)

Transfer Delete

TRANSFER DELETE filename: █

Deletes a file.

Use the Transfer Delete command to delete a file. The filename will no longer appear in your directory.

Command Field

filename:

Type the name of the file you want to delete, or select a filename from the directory. Access asks you to confirm your decision. Press Y to delete the file, or press the Esc key to cancel the command and return to the Session menu.

Transfer Options (Session menu)

Transfer Options

TRANSFER OPTIONS drive: █

Changes the default disk drive or file directory.

Use the Transfer Options command to direct Access to the specified disk drive. You can also specify a directory by typing the directory name after the drive. This drive and/or directory becomes your default.

Command Field

drive:

Type the name of the default drive and/or directory according to the format of your Disk Operating System. See your system manual for this information. Access reads files from, and saves files on, the specified directory and disk drive.

Transfer Protocol

Transfer Protocol (Session menu)

TRANSFER PROTOCOL: **Send** Receive

Sends and receives files with error-checking protocol.

Computer protocol is a convention for coordinating file exchange, assuring accuracy and efficiency. It also lets you transfer binary files. A protocol comprises a special set of characters that describe a block of data. The receiving computer can then compare these characters with the block of data received. If no discrepancy appears, file transfer continues. If a discrepancy occurs, the receiving computer requests the sending computer to retransmit the block of data.

One example of a protocol involves a check sum convention. In this case, the program inserts a check sum representing the sum of the character values in a block of data. The receiving computer then compares this sum with the characters it receives.

Many protocol conventions exist. However, both sender and receiver must use the same one. Access supports XMODEM protocol. Whenever possible, use the Transfer Protocol command to transfer files. See Appendix D, "Using X.PC Connections," for information on the protocol provided during X.PC connections.

After you carry out a Transfer Protocol command, Access displays information about the file transfer in the following format above the status line:

Protocol used		Estimated time remaining			
		Transfer status			
XMODEM:	Time Left: 00:04:03	WAIT	MYFILE.DOC	Count: 0	Retries: 0
		Name of file		Character count	
		Number of transmission retries			

"Time Left" indicates the estimated time remaining for file transfer completion or "N/A" if an estimate is not possible. "Transfer status" indicates whether Access is sending (*SEND*), receiving (*RECV*), or waiting (*WAIT*). *WAIT* means Access is waiting for the host computer to send or acknowledge receipt of the next data packet. "Character count" indicates the number of characters successfully transferred.

When the file transfer is complete, Access displays a completion message, then returns to the Session menu.

The following pages describe the Transfer Protocol Receive and Transfer Protocol Send commands.

Transfer Protocol Receive (Session menu)

Transfer Protocol Receive

TRANSFER PROTOCOL RECEIVE to filename: █

Receives a file from another computer with the XMODEM error-checking protocol.

Use the Transfer Protocol Receive command to receive a file from another computer and save it on disk. The host must be set up to send a file under the XMODEM protocol.

To cancel the file transfer after carrying out the command, press the Esc key. Access asks you to confirm your decision. Press Y to confirm, or press the Esc key to continue the transfer.

Command Fields

to filename:

Type a filename. Access saves the file it receives, using this name.

Transfer Protocol Send (Session menu)

Transfer Protocol Send

TRANSFER PROTOCOL SEND from filename: █

Sends a file to another computer, with the XMODEM error-checking protocol.

You can use the Transfer Protocol Send command to send a file only if the host is set up to receive a file under the XMODEM protocol.

To cancel the file transfer after carrying out the command, press the Esc key. Access asks you to confirm your decision. Press Y to confirm, or press the Esc key to continue the transfer.

Command Field

from filename:

Type the name of the file you want to send, or select a filename from the directory by pressing any direction key.

Transfer Rename

Transfer Rename (Session menu)

```
TRANSFER RENAME old filename: █
                      to new filename:
```

Changes a filename in the directory.

Use the Transfer Rename command to rename a file, leaving the file contents unaltered.

Command Fields

old filename:

Type the name of the file you want to change, or select a filename from the directory by pressing any direction key.

to new filename:

Type the new filename.

Transfer Send

Transfer Send (Session menu)

```
TRANSFER SEND from filename: █
```

Sends a file to another computer.

You can use the Transfer Send command to send a file to another computer only if the host computer is set up to receive a file. Access displays the file it is sending. If your host supports XMODEM error-checking protocol, use the Transfer Protocol Send command to transfer files with greater accuracy.

When you send a file without protocol, you can use the prompt and end-of-line character fields of the Modify Settings command to pace transmissions. (See the Modify Settings command for information on pacing.)

Command Field

from filename:

Type the name of the file you want to send, or select a filename from the directory by pressing any direction key.

Transfer View (Session menu)

TRANSFER VIEW: **Directory** File

Displays your directory of files or a specific file.

Choose the Transfer View Directory command to view your directory of files. Choose the Transfer View File command to view the contents of a specific file. The following pages describe these commands.

Transfer View

Transfer View Directory (Session menu)

TRANSFER VIEW DIRECTORY filename: █

Displays a directory of files.

When you carry out the Transfer View Directory command, Access replaces your current screen display with the directory. Each entry in your directory displays file information in the standard format of your Disk Operating System.

To display the next screen in the directory, press N for Next.

To display directory information for all your files, carry out the command without typing a response in the “filename” field.

Transfer View Directory

Command Field

filename:

Type a drive, directory, and/or filename to display directory information, or select a filename from the directory by pressing any direction key.

You can display filenames that match a particular pattern by typing the pattern. In this way, you can request a group of files with a common characteristic, such as all files beginning with the same letter or having the same extension.

To make a filename pattern, use the asterisk (*) and the question mark (?). The asterisk can replace several characters, the question mark only one. For example, entering the pattern *M** displays all names beginning with the letter M; entering the pattern *???* displays all names containing exactly three characters.

Transfer View File

Transfer View File (Session menu)

TRANSFER VIEW FILE filename: █

Displays the contents of a file.

When you carry out the Transfer View File command, Access replaces your current screen display with the contents of a specific file.

To display the next screen in a file, press N for Next.

Command Field

filename:

Type the name of the file you want to display, or select a filename from the directory by pressing any direction key.

Undo

Undo (Phonebook menu)

Reverses the effect of the last Phonebook change.

The Undo command reverses the most recent Phonebook change, leaving the Phonebook in the condition it was in prior to the change. If you undo a change that added an entry, the Undo command deletes the entry. If you undo a change that deleted an entry, the Undo command inserts the entry.

Because you can reverse the Undo command, you can use it to toggle between before and after views of any change.

If you choose the Undo command and have not made any changes, Access displays a message saying that there are no edits to undo.

Window (Session menu)

Window

WINDOW: **SPLIT** Close Options

Splits your display window into as many as eight windows and assigns different communications and screen display attributes to each.

Use the Window commands to split your original display window into a maximum of eight windows. For example, you may want to display correspondence from several computers in separate windows. The active window responds to the keyboard. The number of the active window appears in the status line after the letter W. You can change the active window by pressing the NEXT WINDOW key (F1).

The display area of your screen, above the command area, is a window to your communications session. This is window 1. If you split this window, you control the new window exactly as you do an unsplit window. Windows are independent of each other and the size of each depends on where you split it.

The following pages describe the Window subcommands.

Window Close (Session menu)

Window Close

WINDOW CLOSE window number: **1**

Closes a window.

When you carry out the Window Close command, Access removes the specified window. If you have only one window, Access ignores the Window Close command.

Command Field

window number:

Type the number of the window you want to close. The proposed response is the number of the current active window.

Window Options

Window Options (Session menu)

```
WINDOW OPTIONS window number: 1 borders: Yes(No) tab spacing: 8
                paint background: 0 foreground: 7 border: 7
                margin position: d word wrap: Yes(No) margin bell: Yes(No)
```

Changes screen display characteristics.

Use the Window Options command to specify screen display characteristics for the specified window. A split window has the same attributes as the “parent” window until you change it explicitly.

Command Fields

window number:

Type the number of the window you want to work with. The proposed response is the number of the currently active window. The original unsplit window is window number 1.

borders:

Choose an option. If you choose “Yes,” Access adds a border to the specified window.

tab spacing:

Type the number of character spaces between tab stops.

paint background:

Type the background color you want, or press any direction key to display the color options. Access will “paint” the background with the color you specify.

foreground:

Type the foreground color you want, or press any direction key to display the color options.

border:

Type the border color you want, or press any direction key to display the color options.

margin position:

Type the column number where you want the right margin to fall. If you type 0, characters beyond the right boundary of the window will not appear. However, these characters are not lost; Access stores them in the review buffer. See the Connect

command for information on reviewing. If you choose the proposed response of “d,” Access wraps characters at the right-hand boundary of the specified window.

word wrap:

Choose an option. If you choose “Yes,” Access wraps words at the right margin.

margin bell:

Choose an option. If you choose “Yes,” Access alerts you with a bell as characters approach the right margin, providing the Options “mute” command field response is “No.”

Window Split (Session menu)

Window Split

```
WINDOW SPLIT: Horizontal Vertical
```

Splits the active window horizontally or vertically.

You can split your active window into two windows by choosing the Window Split Horizontal or Window Split Vertical command. The number of the active window, the one responding to the keyboard, appears after the letter *W* in the status line. You cannot see where a split occurs unless you add a border or change the colors in one of the windows. You can split your screen into as many as eight windows and you can change the borders, tabs, colors, and margins in these windows using the Window Options command. The new window displays the same attributes as its “parent” window until you change them explicitly.

You can review your session in the active window in the same way you would in the original unsplit display window. See the Connect command for information on reviewing data.

The following pages describe the Window Split subcommands.

Window Split Horizontal (Session menu)

Window Split Horizontal

```
WINDOW SPLIT HORIZONTAL at line: 13 assign comm line: 1
```

Splits the active window horizontally.

The new window comprises the display space below the line where the split occurs. The shortest possible window is one line without borders and three lines with borders. The display in the original window scrolls up to accommodate the new window.

Command Fields

at line:

Type the number of the line in the active window where you want the split to occur. The proposed response is the middle of the active window.

assign comm line:

Type the number of the communications line associated with the new window. Data from this communications line appears in the new window.

Window Split Vertical

Window Split Vertical (Session menu)

```
WINDOW SPLIT VERTICAL at column: 40 assign comm line: 1
```

Splits the active window vertically.

The new window comprises the display space to the right of the column where the split occurs. The narrowest possible window is one column wide without borders, and four columns wide with borders. Access truncates the display in the original window to accommodate the new window. Data that arrives after you split the window wraps according to the margin setting in the specified window.

Command Fields

at column:

Type the number of the column in the active window where you want the split to occur. The proposed response is the middle of the active window.

assign comm line:

Type the number of the communications line associated with the new window. Data from this communications line appears in the new window.

21 Microsoft Access Script Commands

This chapter describes the structure of the Microsoft Access Script Command (MASC) language and contains detailed information on each of the commands, functions, and system variables used in MASC.

For information on writing and using scripts, see Chapter 18, “Writing Scripts.”

Elements of MASC

The MASC language consists of commands, variables, constants, functions, and operators. A description of each of these elements follows.

Script Commands and Statements

A script command is a keyword (such as CONNECT, GOTO, or SEND) that instructs Access to perform a certain action. A script command and any associated arguments compose a script statement.

The general form of a script statement is:

label: command argument1, argument2 ... argumentN

Label is a string of characters beginning with a letter, followed by additional letters, numbers, or underline characters, and terminated with a colon. Labels on script command lines are optional. You use a label to identify a line in the script. For example, the script statement GOTO START searches the script file for a line with the label START, and resumes processing at that line. Labels can be any length, but only the first 16 characters are significant. Therefore, labels should be unique within the first 16 characters.

Command is a unique script command keyword.

Script commands and statements

Argument is a variable or constant you include in script command statements to provide additional information for the command. Some commands require arguments; others do not. Use a comma to separate arguments from each other. If you do not provide an optional argument, the system provides a default value.

Enter each script command on a separate line. You can include blank lines to improve readability. You can also include comments by typing a single quote (') followed by the text of your comment. Access ignores any text that follows a single quote when it runs your script.

Variables

Variables

A variable is a name representing a number or a string value. The name must start with a letter, and can be followed by additional letters, numbers, or underline characters. A variable name can be any length, but only the first 16 characters are significant. Therefore, a variable should be unique within the first 16 characters. Some examples of variables are:

```
J
COUNT
A123
USER_RESPONSE
```

The default data type is an integer. Integer values can be between –32768 and 32767.

You can indicate a long integer variable by adding a pound sign (#) to the variable name (for example, SUM#). Long integer values can be between –2147483648 and 2147483647.

Indicate a floating, or single-precision, variable by adding an exclamation point (SUM!). Single-precision values can be between -10^{38} and 10^{38} with 6 or 7 digits of precision, respectively.

Indicate string variables by adding a dollar sign (\$) to the variable name (for example, MYNAME\$).

Note that A, A#, A\$ and A! are four different variables, each with its own data type.

Array Variables When using array variables, indicate the array cell number by placing it between brackets ([]). For example, LIST[5] indicates cell 5 of the LIST array. Use the DIM statement to dimension variables. Only single-dimension variables are valid. You can dimension variables up to 8,000 cells, providing your microcomputer has sufficient memory. All subscripting begins at 0.

To assign a value to a variable name, use the assignment operation (described subsequently).

System Variables and Constants A script file can include both user-defined variables and system variables. A system variable has a predefined range of values. For example, the DUPLEX system variable must have a value of 0, 1, or 2, indicating full, half, or local duplex, respectively. Assigning a value outside this range fails: the variable retains its original value. If you attempt to assign a value to a system variable that does not accept an assignment, Access will ignore your attempt. Usually, a system variable can appear on either side of an assignment statement, indicating Access can either set or check the value.

Predefined system constants help clarify system variable assignments. For example, FULL, HALF, and LOCAL represent the values 0, 1, and 2, respectively. Therefore, the statements DUPLEX = 1 and DUPLEX = HALF are equivalent. The section describing script commands lists system constants associated with a specific command. Some common system constants are:

Name	Value
ON	– 1
OFF	0
TRUE	– 1
FALSE	0

Note All script commands, system variables, system constants, and functions are reserved words; you cannot use them as user-defined variables.

Constants

Constants

A constant can be a number or a string.

Numeric Constants A numeric constant can be either an integer or a floating-point type. An integer constant is a whole number between – 2147483648 and 2147483647, without a decimal point. A floating-point constant is a number between – 10³⁸ and 10³⁸ with 6 or 7 digits of precision, respectively.

String Constants A string constant is a sequence of zero to 255 alphanumeric characters, enclosed in double quotation marks. For example, “The quick brown fox” is a string constant.

To specify nondisplayable ASCII characters in a string, enter a caret (^), followed by the one- to three-digit ASCII decimal value of the character. To indicate a control character, follow the caret with a single uppercase or lowercase letter. For example, to specify the Ctrl-C character in a string, you could enter ^3 or 003 or ^C

Enter all three digits only when necessary to eliminate ambiguity. For example, ^0032 indicates the Ctrl-C character (ASCII value 3) followed by the number 2; ^32 indicates a space (ASCII value 32).

To include a caret (^) in a string, repeat the caret twice (^ ^). To include a quotation mark (") in a string, precede it with a caret (^").

Functions

Functions

The general form of a function reference is:

functionname (argument1, argument2, ... argumentN)

A function always returns a value.

Expressions and operators

Expressions and Operators

An expression can be a variable, a numeric or string constant, or a combination of variables, constants, and operators that produces a single value.

An operator performs a mathematical or logical operation on a value. It can be arithmetic, relational, logical, or an assignment. Access executes arithmetic operations within parentheses first, and then in order of precedence.

Arithmetic Operators An arithmetic operator performs a mathematical operation. The following table lists arithmetic operators in order of precedence.

Arithmetic Operator	Operation	Example
—	Negation	—I
*,/,MOD	Multiplication, division, and modulus	A * B, C/D, I MOD 7
+, —	Addition and subtraction	2 + 2, J — K

Note Use the MOD operator only with integer or long integer operands.

Relational Operators A relational operator compares two values, the result of which is True (– 1) or False (0). All relational operators have equal precedence. The following table lists relational operators.

Relational Operator	Operation	Example
=	Equality	A = B
<>	Inequality	A <> B
<	Less than	A < B
>	Greater than	A > B
<=	Less than or equal to	A <= B
>=	Greater than or equal to	A >= B

Logical Operators A logical operator performs multiple relation, bit manipulation, or Boolean operations. The operands of a logical operator must be integers. The logical operator returns a bit-wise result of True (non-zero) or False (0), thus providing a way to do bit manipulation. Access executes logical operations after arithmetic and relational operations. The following table lists logical operators.

Logical Operator	Example	Result
NOT	NOT expression	True if expression is False; False if expression is True
AND	expression A AND expression B	True if both expressions are True; False if either expression is False
OR	expression A OR expression B	True if either expression is True; False if both expressions are False

Assignment Operator The assignment operator is an equal sign (=). Use it to assign values to variable names. For example, J = 1 or LIST[5] = 123. The operand on the left must be a variable or a cell of an array. The operand on the right must be a valid arithmetic, relational, or logical expression.

The equal sign (=) represents both assignment and equality testing; its interpretation depends on placement within an expression. The first occurrence indicates an assignment. Subsequent occurrences indicate equality testing. For example, the expression `I=J=K` compares J and K for equality and assigns the result True (- 1) or False (0) to the variable I.

Error handling

Error Handling

Script statements can cause fatal or nonfatal errors.

A fatal error stops script file processing, and Access displays an error message. A fatal error usually results from invalid syntax, incorrect argument types or values, duplicate or nonexistent labels, reading or writing to an unopened file, or insufficient memory.

A nonfatal error does not stop script file processing. It usually occurs when Access cannot carry out a correctly specified command. For example, the `CONNECT` command failed because of a busy line, or a `MATCH` statement failed because the host computer did not send the specified match string.

All errors have a unique error number. Fatal error numbers range from 1 to 99. Nonfatal error numbers are over 100. When an error occurs, Access assigns the appropriate error number to the system variable, `ERROR`. Therefore, you can identify errors by checking the error number. Certain commands may return a fatal error number, but continue the script program. The following list shows all the error numbers and messages. For an explanation of these messages, see Chapter 22, "Messages."

- | | |
|----|------------------------|
| 1 | Insufficient memory |
| 2 | Overflow |
| 3 | No end quote |
| 4 | Expression too complex |
| 5 | Not valid syntax |
| 6 | Type mismatch |
| 9 | Subscript out of range |
| 10 | Illegal function call |
| 11 | String too long |
| 12 | Label not found |
| 13 | WHILE without WEND |
| 14 | WEND without WHILE |
| 16 | Duplicate dimension |
| 17 | Duplicate label |

19	Index active
20	FOR without NEXT
21	NEXT without FOR
22	Too many script files
23	Cannot read file
24	Too many CASE statements
25	MATCHBEGIN without MATCHEND
26	Script terminated
27	File not open
28	Bad file mode
29	Input past end
30	Disk error
31	Disk full
32	Too many files
101	Not a valid file
102	Cannot write file
103	Match failure
104	Not connected
105	Cannot rename file
106	Cannot delete file
107	Unable to run program
108	Command canceled
109	Excessive retries error
110	Protocol timeout error
111	Terminated by local operator
112	Terminated by host operator
113	Already connected
114	Not a valid name
115	Connect failure
116	Modem does not support Voice/Data
117	Cannot dial without modem
118	Not a valid phone number
119	X.PC driver not loaded
120	X.PC driver active on the other comm line
121	Disconnect failure

The command descriptions that follow in this chapter list any nonfatal error numbers associated with a command.

Note Before carrying out a command that could cause a nonfatal error, Access resets the ERROR variable to 0.

Running script files

Running Script Files

To run a script, you use the Run command. See Chapter 20, “Session Menu and Phonebook Commands,” for a description of this command.

To stop script processing, press the Esc key twice. A message will appear asking you whether or not to terminate the script. Press Y for Yes or N for No.

In a session, Access requires you to confirm certain commands before it can carry them out. However, to allow scripts to run unattended, confirmation messages do not appear during script processing and Access assumes a response of Y for Yes.

Preprocessing script file labels

Preprocessing Script File Labels

When you run a script file, Access interprets each script statement and performs the specified action. When Access encounters a script label, it remembers its position within the file, so that subsequent references to that label are performed very quickly. If Access encounters a GOTO statement with a label it has not encountered yet, Access searches forward through the script file until it finds that label. If the script file is large, this may take some time.

To eliminate this search time, you can preprocess the labels in a script file by specifying “/L” after the script name in the Run Script command. When you carry out the Run Script command, Access searches for all the labels in the script file, then writes a new version of the script file using the same script filename. This new file contains all the original script statements, plus a table of label names and their positions appended to the file. The next time you run this script, Access will automatically read this table of label names and positions first, and will not need to search ahead for labels.

If you edit the script file after preprocessing it, you should preprocess the file again. If Access determines that a preprocessed file has been edited, it will ignore the label name and position table and will process the script as if it had never been preprocessed.

Session Menu Command Equivalents

Session menu command equivalents

The following table lists commands from the Session menu with their MASC equivalents:

Session Menu	MASC command
Answer	ANSWER [name][,remotecontrol]
Connect	CONNECT [name][,phonenumber][,speed]
Disconnect	DISCONNECT [commline][,channel] [,clearmem]
Goto	COMMLINE = commlinenumber
Modify Settings	DUPLEX = setting SPEED = speedvalue TERMTYPE = setting
Run Script	RUN scriptfilespec [,ignorefatal]
Run Editor	EDITOR [filename]
Run Program	RUNPROG filespec [,clearscreen][,result]
Transfer Capture	CAOPEN filespec [,append] CAPCLOSE
Transfer Send	SENDFILE filespec
Transfer Options	DRIVE\$ = drivespec
Transfer Delete	DELETE filespec
Transfer Rename	RENAME oldfilespec, newfilespec
Transfer Protocol Send	PROTSEND filespec
Transfer Protocol Receive	PROTRECVC filespec
Window Split	newwin = WINDOW(WSPLIT,winnumber, axis, position)
Window Options	result = WINDOW(WPAINT,winnumber, background, foreground, border) result = WINDOW(WBORDER,winnumber, state)
Window Close	result = WINDOW(WCLOSE,winnumber)
CAPTURE ON/OFF key (F3)	CAPTURE = state
PRINT ON/OFF key (F4)	PRINTER = state

Script Commands

The following directory lists each Access script command alphabetically, displays its format, explains its use and presents examples. It also lists any associated nonfatal errors. In referring to this directory, note the following:

- Script language commands, system variables, and functions appear in all uppercase letters. Enter these items as shown, using any combination of uppercase and lowercase letters.
- Arguments appear in *italic*. Enter the appropriate argument.
- Optional items appear in brackets ([]). Enter only the information inside the brackets; do not include the brackets. Arguments are evaluated in order from left to right. When a statement has more than one optional argument, enter arguments in the order you want them evaluated.
- Alternate items appear separated with a bar (|). Enter only one of the items. For example, for Yes|No, enter Yes or No.

ANSWER statement

ANSWER Statement

ANSWER [*name*] [,*remotecontrol*]

Use to answer a call.

This statement instructs Access to wait for a call, answer it, and then continue script file processing at the next line.

Name is a string expression specifying a name from the Phonebook. If you enter a null string or omit the *name* argument, Access uses the current communications settings. If a .LGN script file is associated with the Phonebook name, Access runs this file when the call is answered.

Remotecontrol is an integer expression specifying whether Access should turn control over to the calling system. If the value of *remotecontrol* is True, the calling system will be given control. If the value is False, or if *remotecontrol* is not specified, control will stay with Access.

Example 1

```
ANSWER "HOST",FALSE
```

Answer and use the settings associated with the Phonebook entry "HOST". Keep control local.

Example 2

```
ANSWER "",TRUE
```

Answer and use the current settings. Redirect control to the remote (calling) computer.

Errors

1	Insufficient memory
108	Command canceled
113	Already connected
114	Not a valid name
119	X.PC driver not loaded
120	X.PC driver active on the other comm line

ASC Function

ASC function

$J = \text{ASC}(x\$)$

Use to return the ASCII decimal value of the first character in the string $x\$$.

If the string $x\$$ is null, an "Illegal function call" error results.

Example

```
x$ = "ABC"
J = ASC(x$) 'Set J to 65, the ASCII decimal value of A
```

CAOPEN and CAPCLOSE statements

CAOPEN and CAPCLOSE Statements

CAOPEN *filespec* [,*append*]

CAPCLOSE

Use to control the capturing of correspondence to a disk file. The CAOPEN command opens the specified file and closes any previously opened capture file. The CAPCLOSE command closes the capture file.

Filespec is a string expression specifying the capture filename.

Append is an integer expression specifying whether Access should append to the file. If *append* is True (nonzero), Access will append captured data to the file.

Example 1

```
CAOPEN "stock.rpt"
MATCH "End of Report",100
CAPCLOSE
```

Example 2

```
CAOPEN "MAIL"
SEND "READ ALL"
IDLE 10 'Wait for 10 seconds idle time
CAPCLOSE
```

Error

101 Not a valid file

CAPTURE system variable

CAPTURE System Variable

CAPTURE = *state*

Use to set or check the capture condition.

Setting CAPTURE to False (0) turns off the capture toggle. The capture file remains open but Access does not capture correspondence to the file. Setting CAPTURE to True (– 1) turns on the capture toggle. Use the system constants ON and OFF for clarity.

Example

```
CAPTURE = OFF
CAPTURE = ON
```

CHAIN Statement

CHAIN statement

CHAIN *scriptfilespec*

Use to begin processing a new script file.

This statement halts execution of the current script file and begins execution of the specified script file. Use the COMMON statement to make variables available to chained files.

Example

```
CHAIN "phase2"
```

CHANNEL System Variable

CHANNEL system variable

```
CHANNEL = xpcchannel
currentchannel = CHANNEL
```

Use to set or check the current X.PC channel number.

Xpcchannel is an integer expression between 1 and 15 specifying the X.PC channel number. All subsequent communications occur on the specified channel. If you have not loaded an X.PC driver or have not connected with a host computer, the CHANNEL variable returns 0.

Example

```
CHANNEL = 5 'Turn to channel 5
```

CHR\$ function

CHR\$ Function

$x\$ = \text{CHR}\(J)

Use to convert an ASCII value to its equivalent character.

J is a value between 0 and 255.

Example

`x$ = CHR$(27) 'Set string x$ to the ESCAPE character`

CLOSE statement

CLOSE Statement

`CLOSE filenumber`

Use to close a disk file.

If the CLOSE command specifies an unopened filenumber, no error occurs.

Use the OPEN statement to open a file.

Example 1

`CLOSE 1`

Example 2

`CLOSE REPORTFILENUM`

CLW statement

CLW Statement

`CLW`

Use to clear the active window.

This statement erases the contents of the active window.

COMMLINE System Variable

COMMLINE system variable

COMMLINE = *commlinenumber*

Use to set or check the active communications line.

CommLINenumber is an integer expression specifying the communications line to activate. If you specify a number for a nonexistent communications line, Access will not set COMMLINE. Therefore, you can determine if the system has a second line by specifying COMMLINE as 2 and then checking COMMLINE.

Example 1

```
COMMLINE = 1
```

Example 2

```
COMMLINE = 2 'Check for second commline
IF COMMLINE = 2 THEN MAXLINES = 2 ELSE MAXLINES = 1
```

COMMON Statement

COMMON statement

COMMON *variable* [,*variable2*...]

Use to pass variables to another script program file.

Script variables are local to the script program; only statements within the program can set and reference variables. You can make variables available to other script programs by using the COMMON statement with the CHAIN or RUN command. If you use the RUN command, you must include a COMMON statement in the script program that accesses the common variables, as well as in the program that contains them.

COMMON statements can appear anywhere in a script program, but preferably at the beginning.

Note To include array variables in the COMMON statement, specify the array name. Do not include the brackets.

Example

Script Program 1

```
COMMON I
I = 5
J = 3
RUN "PROGRAM2"
```

Script Program 2

```
COMMON I
TYPE I,J
```

Script program 2 will type 5 and 0, since J was not declared in COMMON.

CONFIRM statement

CONFIRM Statement

CONFIRM *prompt,choices,result*

Use to issue a confirmation message.

Prompt is a string expression that is displayed on the menu prompt line. Only the first 77 characters of *prompt* are displayed. The prompt displayed is followed by a space and a highlight. Graphics characters are not allowed.

Choices is a string expression specifying the list of valid key responses. The choices should all be in capital letters.

Result is an integer variable which will contain the result of the user response.

CONFIRM will set *result* to an integer value corresponding to the selected choice. The user's response can be uppercase or lowercase. If the user presses the Cancel key, CONFIRM will return a value of zero. If the user does not press any of the valid choices, the bell will sound and the user will be prompted again.

Note Both *prompt* and *choices* must be nonzero-length strings. If either string is null, an "Illegal function call" error results.

Example

```
CONFIRM "Enter Y to continue, N to stop", "YN", result
```

If the user presses Y, CONFIRM will return a value of 1.

If the user presses N, CONFIRM will return a value of 2.

CONNECT Statement

CONNECT statement

```
CONNECT [name] [,phonenumber] [,speed]
```

Use to connect to another computer.

Name is a string expression specifying a name from the Phonebook. If the string is null or if the *name* argument is omitted, Access uses the current communications settings. If a .LGN script file is associated with the Phonebook name, Access runs this file when the connection is made.

Phonenumber is a string expression specifying the number to dial. If *phonenumber* is null or omitted, the telephone number stored under the Phonebook name is used.

Speed is an integer expression specifying the desired speed. *Speed* must be a valid speed, such as 300 or 1200. If *speed* is omitted, the speed stored under the Phonebook name will be used.

Example 1

```
CONNECT "SYSTEM1"
```

This statement will connect using the settings and telephone number stored under the SYSTEM1 entry in the Phonebook.

Example 2

```
CONNECT
```

This statement will reestablish the last connection.

Example 3

```
CONNECT "", "555-1234"
```

This statement will reestablish the last connection using the specified telephone number, instead of the number stored in the Phonebook.

Errors

108	Command canceled
113	Already connected
114	Not a valid name
115	Connect failure
116	Modem does not support Voice/Data
117	Cannot dial without modem
118	Not a valid phone number
119	X.PC driver not loaded
120	X.PC driver active on the other comm line

COPYFILE statement

COPYFILE Statement

```
COPYFILE inputfilename, outputfilename [, nbytes]
```

Use to copy all or a portion of one file to another.

Inputfilename is an integer expression specifying a previously opened disk file.

Outputfilename is an integer expression specifying a previously opened output file.

Nbytes is an optional integer or long integer expression specifying the number of bytes to copy from the input file to the output file. If you do not specify *nbytes*, Access copies the input file from the current file position through the end of the file.

Example

```
OPEN 1, "MEMO", "INPUT"
OPEN 2, "MEMOCOPY", "OUTPUT"
COPYFILE 1, 2 'Copies the entire contents of file 1 to file 2
```


CVD and CVD\$ Functions

CVD and CVD\$ functions

```
d# = CVD(datestring)
a$ = CVD$(d# [,pattern])
```

Use to convert string date formats to standard, long integer date formats, and back, in order to perform date arithmetic and convert the results back to date strings.

The CVD function converts the string expression *datestring* to a standard, long integer date in the format *yyyymmdd*. If a data variable is used instead of a string, it must be a string variable (e.g., DAY\$).

Standard dates begin with January 1, 1900. Acceptable formats for *datestring* are:

Format	Examples
yyyymmdd	19840101
mmddyyyy	01011984
mmddyy	010184 10184
mm/dd/[yy]yy	1/1/84 01 01 1984 1-1-84 1,1,1984
yyyy mm dd	1984 1 1 1984/1/1
yyyy mmm dd	1984 Jan 1 1984 January 1 1984JAN01
dd mmm [yy]yy	1 Jan 84 01JAN84 1 Jan, 1984
mmm dd, [yy]yy	Jan 1 84 January 1, 1984

You can use any of the following characters as delimiters between parts of a date:

- ,
- /
-
- (space)

If Access cannot decipher the input string, the CVD function returns 0.

The CVD\$ function converts standard date formats to a string format contained in the string expression *pattern*. The output string expression contains ordinary characters, which Access copies to the output, and conversion specifications, which control the output format of the date components (month, day, year, and weekday name). Each conversion specification begins with a percent character (%) and ends with a conversion character. The following table lists the conversion characters and the date components they affect.

Conversion Character	Date Component Affected
m	Month number
d	Day number
y	Year number
w	Weekday name, uppercase initial - (Monday)
W	Weekday name, all uppercase - (MONDAY)
n	Name of month, uppercase initial - (January)
N	Name of month, all uppercase - (JANUARY)

Between the percent and conversion characters, you can include an optional one- or two-digit field width followed (optionally) by the character “z” to indicate a leading zero (0) fill on number date components.

Example 1

If the input date (in standard date format) is 1/1/84, the following patterns generate the indicated output strings.

Pattern	Output
“%m/%d/%y”	1/1/1984
“%2m/%2d/%2y”	1/ 1/84
“%2zm/%2zd/%2y”	01/01/84
“%w %n %d, %y”	Sunday January 1, 1984
“%2zd%3N%2y”	01JAN84
“%w”	Sunday
“Today is: %m/%d/%y”	Today is: 1/1/1984

Note If you do not specify a pattern argument, the CVD\$ function uses a default pattern of “%m/%d/%2y.”

Example 2

```
d# = CVD(DATE$)
TYPE CDV$(d#,"Today is: %w %m %d, %y")
```

This statement will type out the message “Today is:” followed by the day of the week, month, day, and year of the system date.

CVDF Function

CVDF function

d# = CVDF(*d#*, *formnumber*)

Use to convert between standard, seven-day, and five-day date formats.

The standard date format is *yyyymmdd*. Seven-day dates are the number of calendar days since January 1, 1900. Five-day dates are the number of business days since January 1, 1900. Access stores all three date formats as long integers.

The CVDF function facilitates date arithmetic using seven- or five-day dates. For example, subtracting one seven-day date from another gives the number of days between them. To determine the day of the week, use a MOD operation on seven- or five-day formats (day number 1 is Monday, January 1, 1900).

Formnumber is an integer expression specifying the desired date form conversion. The following table lists form numbers and definitions.

Form Number	Converts From	To
1	Standard	7-Day
2	Standard	5-Day
3	7-Day	Standard
4	7-Day	5-Day
5	5-Day	Standard
6	5-Day	7-Day

Note If you convert a Saturday or Sunday date to a five-day format, Access adjusts the date to the previous Friday.

Example 1

This statement converts March 7, 1984 to seven-day format:

```
d7# = CUDF(19840307, 1)
```

Example 2

This statement calculates the number of business days between 6/1/84 and 1/1/85:

```
ndays = CUDF(19850101,2) - CUDF(19840601,2)
```

Example 3

This statement checks if D# (in standard format) was a Monday:

```
IF CUDF(D# ,1) MOD 7 = 1 THEN TYPE "It is a MONDAY"
```

CVLIST function

CVLIST Function

result = CVLIST(*list,array*)

Use to convert a list of number ranges and store them in an integer array for more efficient processing.

List is a string expression containing a list of number ranges. Specify a number range in one of the following formats:

beginnumber-endnumber

beginnumber:endnumber

number

Beginnumber, *endnumber* and *number* are positive integers. Use *beginnumber* and *endnumber* to specify the beginning and end of a range, separated with a colon (:) or a dash (-). Use *number* to indicate a range beginning and ending with a specific value. Use a comma (,) to separate number ranges from each other.

Array is an integer array where Access stores converted numbers. Access stores each range in an odd- and even-numbered cell pair, starting with cell 1. For single number ranges, Access stores the same value in both cells. Access stores the number of converted ranges in cell 0.

CVLIST returns an integer value indicating the success or failure of the conversion. The value returned and their meanings are:

Value	Meaning
0	Successful conversion.
> 0	Position of an error (an invalid character — not a number, dash, colon, or comma) in the <i>list</i> string.
-1	Array not large enough. Access has encountered more ranges than can fit in the array; it has stored as much data as possible.

Example

```
result = CVLIST("1:5,6,10-15", I)
```

In this example, array I contains the following values:

```
I[0] = 3
I[1] = 1
I[2] = 5
I[3] = 6
I[4] = 6
I[5] = 10
I[6] = 15
```

CVT function

CVT Function

$t\# = \text{CVT}(\text{timestring})$

Use to convert string time formats to long integer time formats.

This function converts time formats contained in the string expression *timestring* to a long integer in the format HHMMSS. CVT will return a value between 0 and 235959. The acceptable time string formats are:

HH AM | PM | A | P

HH:MM [:SS] [AM | PM | A | P]

HHMM [:SS] [AM | PM | A | P]

If Access cannot decipher the input string, the CVT function returns -1 .

Example

```
t# = CVT(TIME$)
IF t# < 120000 THEN TYPE "Good Morning" ELSE TYPE "Good Afternoon"
```

DATE\$ system variable

DATE\$ System Variable

$d\$ = \text{DATE\$}$

Use to set or check the system date.

This variable returns the system date in the string format “mm/dd/yy.” Assigning a value to the DATE\$ variable updates the system date. You can assign a value in any format acceptable to the CVD function. If you set the date to an invalid date specification, Access will not update the system date.

Example 1

```
TYPE "Today's date is: ",DATE$
```


Example 2

```
TYPE "Enter date: ";
INPUT NEWDATE$
DATE$ = NEWDATE$
```

DELETE Statement

DELETE statement

DELETE *filespec*

Use to delete a file from the disk.

Filespec is a string expression specifying the name of the file to be deleted.

Example

```
DELETE "mail.old"
```

Error

106 Cannot delete file

DIM Statement

DIM statement

DIM *arrayname1*[*size*] [,*arrayname2*[*size*]...]

Use to define a variable to be an array of specified size.

Arrayname is a valid variable name.

Size is a positive integer constant between 1 and 8000. *Size* is required, and must be enclosed in brackets ([]). When you dimension arrays, Access initializes numeric arrays to all zeroes and string arrays to null strings.

Example

```
DIM LIST[20], NAME$[10]
```


DIR\$ function**DIR\$ Function**

filename\$ = DIR\$(*n*)

Use to get the *n*th filename matching the most recent pattern contained in the DIRSPEC\$ system variable.

The argument *n* is an integer expression specifying which directory entry to return. Numbering begins with 1. If a zero is passed to DIR\$, it will return the next filename in the DOS directory listing. If *n* is outside the range of the matching files, or if there are no more matching filenames, DIR\$ returns a null string.

Example 1

The following program types out all filenames having the extension .DOC that are larger than 10000 bytes:

```
DIRSPEC$ = "*.DOC"
N=0
A:  N=N+1
    IF DIR$(N) = "" THEN GOTO DONE
    IF LOF(DIR$(N)) > 10000 THEN TYPE DIR$(N)
    GOTO A
DONE:
```

Example 2

The following program counts the number of files in the directory MAIL:

```
DIRSPEC$ = "\MAIL\*,*"
NFILES = 0

WHILE DIR$(0) < > ""
  NFILES = NFILES + 1
WEND

TYPE "Number of files = ",NFILES
```

DIRSPEC\$ System Variable

DIRSPEC\$ system variable

DIRSPEC\$ = *pattern*\$
lastpattern\$ = DIRSPEC\$

Use to find files that match a specified pattern in a directory.

The DIRSPEC\$ system variable is used in conjunction with the DIR\$ function to obtain the names of files matching a particular pattern.

Pattern is a string expression specifying the DOS file specification. If the string is null, the pattern *.* is used.

You must set DIRSPEC\$ before calling the DIR\$ function. See the DIR\$ function for examples.

DISCONNECT Statement

DISCONNECT statement

DISCONNECT [*commline*][,*channel*][,*clearmem*]

Use to disconnect a communications line.

Commline is an optional integer expression specifying the communications line to disconnect. If *commline* is not specified, the active communications line will be disconnected.

Channel is an integer expression specifying the X.PC channel to disconnect. If there is an X.PC connection, and *channel* is not specified, the active channel will be disconnected. Specifying a zero (0) for *channel* will disconnect all channels as well as the specified communications line.

Clearmem is an optional integer expression specifying whether the memory associated with the specified channel should be released. If *clearmem* is True (nonzero), the channel memory will be released upon disconnecting. See Appendix D, "Using X.PC Connections," for more information on disconnecting and clearing channel memory.

Example 1

DISCONNECT

Example 2

```
DISCONNECT 1,1      'Disconnects channel 1 on comm line 1
```

Errors

```
108    Command canceled
121    Disconnect failure
```

DISKSPACE function

DISKSPACE Function

freebytes# = DISKSPACE(*drive*)

Use to determine the amount of free disk space.

This function returns a long integer value.

Drive is a string expression specifying the desired drive. Only the first letter of the expression is used. If a null string is specified, DISKSPACE returns the free space for the default drive. If a nonexistent drive is specified, DISKSPACE returns -1 .

Example 1

```
IF DISKSPACE("") < 1000 THEN GOTO NOROOM
```

Example 2

```
IF DISKSPACE("A") < 1000 THEN TYPE "Warning! No space on A:"
```

DISPLAY system variable

DISPLAY System Variable

DISPLAY = *state*

Use to enable or disable the display of incoming communications data on the current communications line.

Setting DISPLAY to True (-1) instructs Access to display all incoming communications data. Setting DISPLAY to False (0) instructs Access not to display data. In either state, the

communications, capturing and printing, and MATCH statements continue as usual.

You can use the system constants, ON and OFF, for clarity.

Note When the script file completes processing, DISPLAY is automatically set to ON.

Example

```
DISPLAY = ON
DISPLAY = OFF
```

DRIVE\$ Variable

DRIVE\$ variable

```
DRIVE$ = drivespec
curdrive$ = DRIVE$
```

Use to set or check the default drive and/or directory.

Drivespec is a string expression specifying the new default drive and/or directory setting.

Examining the DRIVE\$ variable shows the current default drive and directory.

Example 1

```
DRIVE$ = "B:"
```

Example 2

```
OLDDRIVE$ = DRIVE$ 'Save current default drive
DRIVE$ = "B:\MAIL"
DRIVE$ = OLDDRIVE$ 'Restore to original default drive
```

DUPLEX system variable

DUPLEX System Variable

DUPLEX = *setting*

Use to change the active communications line duplex.

Setting is an integer expression of 0, 1, or 2, corresponding to FULL, HALF, and LOCAL duplex, respectively.

You can use the system constants, FULL, HALF, and LOCAL, for clarity.

Example 1

```
DUPLEX = FULL
```

Example 2

```
DUPLEX = 1
```

EDITOR statement

EDITOR Statement

EDITOR [*filename*]

Use to run the text editor.

Filename is an optional string expression containing the name of the editing file you want Access to load for editing. After Access executes the EDITOR statement, the editor program is loaded into memory and the Access program is temporarily suspended. When you quit the editor program, control returns to Access and script processing resumes.

Note When you use the EDITOR statement, Access erases the contents of the review buffers to provide space for the program.

Example

```
EDITOR "memo"
```


EOF Function

EOF function

$J = \text{EOF}(\text{filenumber})$

Use to determine if the specified file is positioned at end of file.

An attempt to read data when positioned at end of file will result in the "Input past end" error message. Use the EOF function before issuing a READ command.

EOF will return True (- 1) if the file is positioned at end of file. Otherwise, it returns False (0).

Example

```
WHILE NOT EOF(1)
READ TEXT$
TYPE TEXT$
WEND
```

ERROR System Variable

ERROR system variable

$J = \text{ERROR}$

Use to return the error number associated with an error condition.

Access sets the ERROR variable whenever it encounters an error. ERROR contains the error number for the last occurrence of an error. Errors can be fatal or nonfatal. Fatal errors automatically stop script program execution. Nonfatal errors only set the ERROR variable; you must identify nonfatal errors. Possible nonfatal errors are described in each script command that might generate them.

Example 1

```
OPEN 1,"REPORT","OUTPUT"
IF ERROR THEN GOTO OPENFAILED
```

Example 2

```
CONNECT "", "555-1234"
IF ERROR THEN CONNECT "", "555-5678"
IF ERROR THEN GOTO CONNFALL
```

EXISTS function

EXISTS function

EXISTS(*filespec*)

Use to check for the existence of a file.

This function returns True (– 1) if the file exists, or False (0) if it does not.

Example 1

```
IF EXISTS("REPORT.TMP") THEN GOTO OVERWRITE
```

Example 2

```
IF NOT EXISTS(FILENAMES) THEN GOTO NOTFOUND
```

FOR and NEXT statements

FOR and NEXT Statements

```
FOR indexvariable = begin TO end [STEP step]  
.  
.  
NEXT
```

Use to execute a group of script statements a number of times in a loop.

Indexvariable is an integer variable used as a counter.

Begin, *end*, and *step* are integer expressions.

Access sets the counter to *begin*, initially. When it encounters the NEXT statement, it adds *step* to the counter and compares the counter to the *end* value. If the counter is greater than *end*, the loop terminates and processing resumes with the statement following the NEXT statement; otherwise, Access repeats the loop. When Access encounters the FOR statement and the *begin* value is greater than the *end* value, it omits the loop.

If the *step* value is negative, Access reverses the test. The loop continues until *indexvariable* is less than the *end* value.

When using FOR-NEXT loops, you can nest FOR-NEXT loops by using different index variables as counters. You cannot reuse index variable names within nested FOR-NEXT statements. Every FOR must have a corresponding NEXT.

Example 1

```
FOR I = 1 TO 10
TYPE I
NEXT
```

Example 2

```
FOR J = K TO L STEP M
'
'
NEXT J
```

GETPOS Function

GETPOS function

location# = GETPOS(*filename*)

Use to determine the current position in a file.

Filename is an integer expression specifying a previously opened disk file. GETPOS returns a long integer value indicating the current byte number position. Numbering starts at 1.

Example

```
currentloc# = GETPOS(1)
```

GOTO Statement

GOTO statement

GOTO *label*

Use to transfer control to the line containing the specified label.

If Access does not encounter the label, it displays an error message and stops script file processing.

Example

```
GOTO TRYAGAIN
```

IDLE statement

IDLE Statement

IDLE *time*

Use to suspend script processing until host transmission ceases for a specified time.

This statement blocks further script processing until host computer transmission on the active communications line has stopped. This command is useful for synchronizing script processing with a host computer that has no unique prompt to match on. In this case, the absence of host computer transmission for a specified time indicates it is ready to receive input or has completed output.

Time is an integer expression specifying the amount of idle time in seconds.

Example

```
SEND "TYPE REPORT"
IDLE 10 'Wait for no transmission for 10 seconds
SEND "LOGOFF"
```

IF statement

IF Statement

IF *expression* THEN *statement* [ELSE *statement*]

Use to allow conditional processing of script commands.

If the result of *expression* is True (non-zero), Access executes the THEN statement. If the result of *expression* is False (0), Access omits the THEN statement and executes the ELSE statement.

Example 1

```
IF A$ = "1" THEN GOTO LOGIN1
```


Example 2

```
IF RESPONSE = 1 THEN COUNT=COUNT+1 ELSE COUNT=0
```

Example 3

```
IF EXISTS(FILE$) THEN FILESEND FILE$ ELSE GOTO ERROR
```

INKEY\$ System Variable

INKEY\$ system variable

k\$ = INKEY\$

Use to return one character from the keyboard.

If no key has been pressed, INKEY\$ returns a null string. Function, Alt, and other non-ASCII keys are returned as a two-character string. The first character is always a zero (0), and the second character is the keyboard scan code. Since Access will always intercept certain function keys (for example, F5 displays status lines), not all keys are accessible to INKEY\$.

If several characters are pending, only the first is returned. Characters read by INKEY\$ are not displayed on the screen.

Example

```
A:  TYPE "1. Choice 1"
    TYPE "2. Choice 2"
    TYPE "Enter number: ";

B:  K$ = INKEY$
    IF K$ = "" THEN GOTO B
    IF K$ = "1" THEN GOTO CHOICE1
    IF K$ = "2" THEN GOTO CHOICE2
    GOTO A
```

INPUT statement

INPUT Statement

INPUT *variable* [,*maxinput*]

Use to accept input from the keyboard during script processing.

Variable is a string variable name. The INPUT command accepts only printable characters. To terminate an entry, press ENTER. To erase a character, press the BACKSPACE key. You can enter up to 255 characters in response to the INPUT statement.

Maxinput is an integer expression specifying the maximum number of characters that Access accepts as input. *Maxinput* must be between 0 and 255. If *maxinput* is not specified, 255 is used. If 0 is specified, INPUT does not wait for the ENTER key to be pressed.

Example

```
TYPE "Enter your name:"  
INPUT NAMES
```

INSTR function

INSTR Function

location = INSTR(*n*, *x*\$, *y*\$)

Use to return the position of the first occurrence of string *y*\$ in string *x*\$, beginning at string position *n*.

String position *n* is an integer expression greater than 0.

If *n* is greater than the length of string *x*\$ or if Access does not find *y*\$, INSTR returns zero (0).

Example

```
x$ = "ABCDEFGH"  
position = INSTR(1,x$,"D") 'Set position to 4  
position = INSTR(3,x$,"GH") 'Set position to 7
```

LEN Function

LEN function

$n = \text{LEN}(x\$)$

Use to return the number of characters in a string.

Access counts all characters, including nonprintable characters.

Example

```
n = LEN$("HELLO")    'n will be set to 5
```

LOCK System Variable

LOCK system variable

`LOCK = state`

Use to set or check a script file state that enables or disables use of the Esc key to cancel script file processing.

Setting LOCK to True (non-zero) instructs Access to ignore an Esc character, preventing a user from stopping script file processing. Setting LOCK to False (0) reenables the processing of the Esc character.

Note Each script file must be locked individually. If a locked script file runs another script, that new script must also be locked if desired. If the new script is not locked, and it is canceled, control will return to the initial script file, which will continue to run.

Example

```
LOCK = ON 'Prevent user from cancelling this script program
```

LOF function

LOF Function

l# = LOF(*filespec*)

l# = LOF(*filenumber*)

Use to return the length (number of bytes) allocated to the file.

LOF returns a long integer value.

Filespec is a string expression containing the name of the file.
If the file does not exist, LOF returns zero (0).

Filenumber is the number of a previously opened file.

Example

```
l# = LOF("ABC.DAT")
```

MATCH statement

MATCH Statement

MATCH *text* [,*waittime*]

Use to halt script file processing until the specific text string arrives from the active communications line.

This statement instructs Access to wait for the specified host computer response and then proceed with script file processing.

Text is a string expression specifying the string to match on. If you specify a null string, Access waits for any character to arrive from the host computer before proceeding. This lets you identify the beginning of host computer transmission.

Waittime is an integer expression specifying the number of seconds before Access registers a match failure error. If you do not specify the wait time, Access uses a default time of 30 seconds.

Note The MATCH statement automatically releases a PAUSE ON condition, if one exists. See the PAUSE system variable.

Example

```
MATCH "LOGIN PLEASE:"  
SEND "MYACCOUNT MYPASSWORD"
```


Errors

- 103 Match failure
- 104 Not connected

MATCHBEGIN and MATCHEND Statements

MATCHBEGIN and MATCHEND statements

MATCHBEGIN [*timeout*]

```
.
CASE string1
    statements
CASE string2
    statements
CASE stringN
    statements
.
MATCHEND
```

Use to match on multiple text strings.

Timeout is an optional integer expression specifying the amount of time Access should wait for the host computer to match one of the strings before generating a match error.

When a match occurs, processing resumes at the statement following the successful CASE statement. If no matches occur, processing resumes at the statement following the MATCHEND statement.

You can specify up to 16 CASE statements within a MATCHBEGIN-MATCHEND statement pair.

Note The MATCHBEGIN statement automatically releases a PAUSE ON condition, if one exists. See the PAUSE system variable.

Example

```
SEND PASSWORD$
MATCHBEGIN 10
    CASE "ACCOUNT:"
        SEND ACCOUNTID$
        GOTO LOGGEDIN
    CASE "YOU WERE DISCONNECTED. RECONNECT?"
        SEND "Y"
        GOTO LOGGEDIN
MATCHEND
GOTO FAILED 'Did not have match in either string
```


Errors

- 103 Match failure
- 104 Not connected

MHS commands

MHS Commands

MHSIMAGE\$

MHSREAD

MHSWRITE

Use to process files stored in a message format.

MHS stands for Message Handling System. This system has been proposed as a standard for electronic messaging by the international standards agency, CCITT. The X.400 series of CCITT standards contains the complete specification of the messaging standard. This standard supports a model in which each message consists of an envelope and content. The envelope portion contains information about the addressee, date, forwarding, request for confirmation, and other related items. The content section contains the body of the message.

The envelope portion of the message contains envelope header items. Each header item is a unique text string identifying a header. For example, the envelope:

```
To: John
From: Mary
Date: Feb. 14, 1984
```

contains three header items; "To: ", "From: ", and "Date:". A header item can extend beyond one line, and it can appear more than once. For example, the envelope:

```
To: John Smith
    100 Main Street
    Anytown, USA 12345
From: Mary
CC: Tim
CC: Al
Date: Feb. 14, 1984
```

contains a multi-line header for the addressee and two courtesy-copy recipients.

The MHSREAD and MHSWRITE commands read and write the envelope portion of a message. Access uses the following syntactic rules to interpret the format of an envelope containing multi-line items and multiple addressees.

- Begin each header item on a new line, left justified.
- Indicate continuation lines by at least one space (a blank or a tab) preceding the continuation text.
- Terminate each line with a carriage return/linefeed pair or a single linefeed.
- Indicate the end of an envelope by a blank line (a line with zero or more blanks/tabs). Envelope processing also terminates upon an end-of-file condition.

The content portion of the message follows the header portion and is treated as a stream of characters. The content can be either text or binary data.

Note The COPYFILE command is useful in extracting or inserting the content portion of a message.

MHSIMAGE\$ Function

MHSIMAGE\$ function

result\$ = MHSIMAGE\$ (*filenumber*,*envelopearray*,*pattern*)

Use to generate a string containing portions of an MHS envelope.

Filenumber is an integer expression specifying the filenumber to read from. The file must be open for input. Access starts scanning for envelope items at the current file position.

Envelopearray is a string array that contains the text of the envelope header item specifiers. For example, the following script statements define an envelope containing three header item specifiers:

```
ENV$[0] = "3"
ENV$[1] = "From: "
ENV$[2] = "To: "
ENV$[3] = "Date: "
```

Cell 0 of the array must contain the count of the number of header items in string representation.

Pattern is a string expression specifying the format of the result string. The pattern contains ordinary characters, which Access copies to the result string, and conversion specifications, which control the output format of the envelope items.

Conversion specifications are in the form:

`%nn[U]{L|R|N}`

nn is a one- to two-digit number that indicates the field width. U is an optional character specifying that the envelope item contents should appear in uppercase. The letters “L” and “R” indicate whether the envelope item contents should be left- or right-justified.

Each format specifier matches with the appropriate envelope item (i.e., the first specifier is used for envelope item 1).

Example

File 1 contains the following text:

```
To: John
From: Mary
Date: 6/15/85
```

The following script program generates a string from the text in file 1, which it stores in result\$:

```
DIM ENV$(3)
ENV$(0) = "3"
ENV$(1) = "From: "
ENV$(2) = "To: "
ENV$(3) = "Date: "
result$ = MHSIMAGE$(1,ENV$,"From: %10UL To: %10L Date: %8R")
```

When the script finishes, the contents of result\$ are:

```
From: MARY      To: John      Date: 6/15/85
```


MHSREAD Statement

MHSREAD statement

MHSREAD *filenumber*, *envelopearray*, [*varlist*..]

Use to read the envelope portion of an MHS formatted file.

Filenumber is an integer expression specifying the filenumber to read from. The file must be open for input. Access starts scanning for envelope items at the current file position.

Envelopearray is a string array which contains the text of the envelope header item specifiers. For example, the following script statements:

```
ENV$(0) = "3"
ENV$(1) = "To: "
ENV$(2) = "From: "
ENV$(3) = "Date: "
```

define an envelope array containing three header item specifiers. Cell 0 of the array must contain the count of the number of header items in string representation.

Varlist is a list of string variables or array names. Access associates the first envelope item with the first variable in *varlist*, the second envelope item with the second variable, and so on. If Access encounters fewer variables than envelope items, it ignores the extra items; if it encounters more variables than envelope items, it ignores the extra variables.

As Access reads an input file and matches on an envelope header item, it stores the data associated with this item in the appropriate variable. If Access encounters an envelope item header more than once, it stores only the first occurrence of the item. However, if the variable is an array variable, Access stores each occurrence of the item in the next cell of the array. Access stores the number of occurrences in cell 0 of the array in a string representation. If the number of occurrences of a header item is greater than the number of array cells, Access stores as many items as possible and ignores the rest.

Before Access begins reading, it sets all non-array variables to an empty string, and sets cell 0 of all arrays to "0". Therefore, if Access does not encounter an envelope item, it leaves the associated variable blank.

Access does not distinguish between uppercase and lowercase when matching on envelope header item specifiers. For example, the envelope item "To:" matches on "TO:", "to:", "To:", or "tO:".

When the MHSREAD command is complete, Access positions the input file at the first character following the blank line that terminates the envelope portion of the message.

Example

The following file is open as file number 1:

```
To: John
To: Jim
From: Mary
CC: Jill
```

The following are script statements:

```
DIM ADDRESSES[10], ENV[4]
ENV[0] = "4"
ENV[1] = "To: "
ENV[2] = "From: "
ENV[3] = "CC: "
ENV[4] = "Subject: "
MHSREAD 1, ENV$, ADDRESSES$, SENDER$, CC$, SUBJ$
```

The variables contain the following data (SUBJ\$ contains no data because there is no subject item in the input file):

```
ADDRESSES[0] = "2"
ADDRESSES[1] = "John"
ADDRESSES[2] = "Jim"
SENDER$ = "Mary"
CC$ = "Jill"
SUBJ$ = ""
```

MHSWRITE statement

MHSWRITE Statement

MHSWRITE *filenumber*, *envelopearray*, [*varlist...*]

Use to write MHS envelope item header text and header item contents.

The MHSWRITE statement generates an MHS formatted envelope.

Filenumber is the number of a file you opened previously for output.

Envelopearray is a string array which contains the text of the envelope header item specifiers. Format this array as for the MHSREAD statement.

Varlist is a list of string expressions specifying the data to be written after each envelope item specifier.

The MHSWRITE command instructs Access to write each envelope item followed by the data contained in the matching variable/array. If an array appears in *varlist*, cell 0 of the array must contain the number of cells (in string representation) that Access should write. Access writes only non-null strings.

Example

The following are script statements:

```
DIM TO$(2), ENV$(3)
ENV$(0) = "3"
ENV$(1) = "To: "
ENV$(2) = "From: "
ENV$(3) = "Date: "
TO$(0) = "2"
TO$(1) = "John"
TO$(2) = "Jim"
MHSWRITE 1, ENV$, TO$, "Mary", "Feb. 14, 1984"
```

This is the output file they produce:

```
To: John
To: Jim
From: Mary
Date: Feb. 14, 1984
```

MID\$ Function

MID\$ function

$z\$ = \text{MID}\$(x\$, n, m)$

Use to extract a string of *m* characters from string *x*\$, starting at character position *n*.

Character position *n* must be greater than 0. If the string has less than *m* characters, MID\$ returns all characters to the right of *n*, through the end of the string. If *n* is greater than the number of characters in the string, MID\$ returns a null string.

Example

`z$ = MID$("HELLO GOODBYE",7,13)` 'z\$ will be set to "GOODBYE"

ONLINE system variable

ONLINE System Variable

status = ONLINE

Use to check whether the current communications line is connected.

ONLINE returns True (– 1) if the communications line is connected. It returns False (0) if the line is not connected.

Example

IF ONLINE THEN GOTO PROCEED

OPEN statement

OPEN Statement

OPEN *filenumber*, *filespec* [, *filemode*] [, *reclen*]

Use to open a disk file for input or output operations.

Filenumber is an integer expression between 1 and 4. You can specify no more than four open files at a time.

Filespec is a string expression representing the filename.

Filemode is an optional string expression which must have one of the following values:

Filemode	Use
“INPUT”	For input only operations.
“OUTPUT”	For output only operations. Access overwrites existing file.
“RANDOM”	For updating both input and output operations. If the file does not exist, Access creates a new one.
“APPEND”	Same as RANDOM, but positions to end of file.

If you do not specify *filemode*, the default is “RANDOM.”

Reclen is an integer between 1 and 255. *Reclen* and the SEEKREC command instruct Access to position a file at a specific record number. In this case, the SEEKREC command instructs Access to calculate the character position of the file by multiplying the record number by the *reclen* value. To use the SEEKREC

command on a fixed-record-length file, make sure you specify the exact number of characters in the record, including any end-of-line characters (for example carriage return/linefeed pairs).

Note If you use the filename of a file that is already open, Access automatically closes it before opening the file you specified.

Example 1

```
OPEN 1,"stock.rpt"
```

Example 2

```
OPEN FILEOUT,FILES$, "INPUT"
```

Example 3

```
OPEN 2,"data.dat", "RANDOM",23
```

Error

101 Not a valid file.

PANEL System Variable

PANEL system variable

PANEL = *state*

Use to enable and disable the display of instrument panels. The display remains until another menu replaces it or a PANEL = OFF statement is encountered.

The CONNECT, PROTSEND and PROTRECVC commands normally display an instrument on the second-to-last line of the screen. The CONNECT command displays the modem responses during dialing. The PROTSEND and PROTRECVC commands display the file transfer progress during XMODEM transmissions. The PANEL system variable controls whether these instrument panels are to appear during script processing. Setting PANEL to True (– 1) will enable the display. Setting PANEL to False (0) will disable the display.

Example

```
PANEL = ON
PANEL = OFF
```

PATHHOME\$ and PATHRUN\$ system variables

PATHHOME\$ and PATHRUN\$ System Variables

ph\$ = PATHHOME\$

pr\$ = PATHRUN\$

Use to return the drive and/or directory containing the Access program or containing the current script file.

PATHHOME\$ contains the MS-DOS drive or directory location of the Access program.

PATHRUN\$ contains the MS-DOS drive or directory location of the most recently run script file.

Note that if a script program contains a RUN or LOADVAR command, Access changes PATHRUN\$ to reflect the new script file location. Access does not reset PATHRUN\$ when control is returned to the original script file.

Note Both PATHHOME\$ and PATHRUN\$ return the drive or directory specification in the same format as it appears in a DOS directory listing. The directory specification does not contain the trailing backslash (\) unless the current directory is the root directory (for example, A:\ if the directory is the root directory on drive A). Thus, to form a directory-filename specification, you need to check for the presence of a trailing backslash.

Example 1

```
DRIVE$ = PATHRUN$ 'Reset default drive to current script
location
```

Example 2

```
RUN PATHHOME$+"MAIL" 'Run the script MAIL from the Access
directory
```

PAUSE System Variable

PAUSE system variable

PAUSE = *setting*

Use to pause data processing on the current communications line.

Set PAUSE to True (- 1) to disable processing of characters. Set PAUSE to False (0) to enable processing.

Processing of characters is automatically enabled whenever a MATCH, MATCHBEGIN, or READCOM command is executed.

Note Even while PAUSE is in effect, Access reads characters from the communications line and stores them in the communications buffer. You can use the system constants, ON and OFF, for clarity.

Example

```
PAUSE = ON
PAUSE = OFF
```

POS Statement

POS statement

POS *row,column*

Use to position the highlight in the active window.

Row and column numbering starts at 1. Position 1,1 is the upper left corner of the window. If the specified position is outside the boundaries of the active window, the highlight stops at the nearest boundary.

Example

```
POS 10,20
```

PRINT statement

PRINT Statement

PRINT [*list of expressions*] [;]

Use to print the results of the specified expressions on the printer. The expressions in *list of expressions* should be separated by commas.

After printing the list, PRINT will send a carriage return and a linefeed character to the printer. To suppress the sending of a carriage return and linefeed, follow the string with a semicolon (;).

Example

```
PRINT "Today's date is: ",DATE$
```

Error

108 Command canceled

PRINTER system variable

PRINTER System Variable

PRINTER = *state*

Use to set or check the printer state.

Enables and disables the printing of data from the communications line. Setting PRINTER to True (– 1) sends incoming data from the active communication line to the printer. You can use the system constants, ON and OFF, for clarity.

Example

```
PRINTER = ON  
PRINTER = OFF
```

PRINTFILE Statement

PRINTFILE statement

PRINTFILE *filenumber* [,*nbytes*]
 PRINTFILE *filespec*

Use to print the contents of a file.

Filenumber is an integer expression specifying a previously opened input disk file.

Nbytes is an optional integer or long integer expression specifying the number of bytes to print. If you do not specify *nbytes*, Access prints the file from the current file position through the end of the file.

Filespec is a string expression specifying a filename.

Example

```
OPEN 1, "MEMO", "INPUT"  
PRINT 1
```

Errors

101 Not a valid file
 108 Command canceled

PROTRECVC Statement

PROTRECVC statement

PROTRECVC *filespec*

Use to receive a file using XMODEM protocol.

Filespec is the name of the file where Access will store received data.

PROTRECVC will display an instrument panel on the second-to-last line of the screen, showing the progress of the file transfer. Use the PANEL system variable to disable this display.

Example

```
PROTRECVC "memo"
```


Errors

1	Insufficient memory
102	Cannot write file
104	Not connected
109	Excessive retries error
110	Protocol timeout error
111	Terminated by local operator
112	Terminated by host operator

PROTSEND statement**PROTSEND Statement**

PROTSEND *filespec*

Use to send a file using the XMODEM protocol.

Filespec is the name of the file Access will send.

PROTSEND will display an instrument panel on the second-to-last line of the screen, showing the progress of the file transfer. Use the PANEL system variable to disable this display.

Example

```
PROTSEND "memo"
```

Errors

1	Insufficient memory
101	Not a valid file
104	Not connected
109	Excessive retries error
110	Protocol timeout error
111	Terminated by local operator
112	Terminated by host operator

QUIT Statement

QUIT statement

QUIT

Use to stop the Access program and return control to DOS. The Phonebook is not updated, and any connections that have not been disconnected remain connected. Use the DISCONNECT statement to disconnect the active communications line before quitting.

READ Statement

READ statement

READ *filenumber*,*stringvar*

Use to input data from a previously opened disk file.

Filenumber is an integer value or variable specifying the filenumber.

Stringvar is a string variable to which Access assigns the data it reads. Access reads data until it reaches an end-of-line mark or up to 255 characters. If you have specified a *reclen* value in the OPEN command for this file, Access will read to an end-of-line mark or up to *reclen* characters.

Example

```
READ 1,LINES$
```

READCOM Statement

READCOM statement

READCOM *text\$* [,*timeout*] [,*maxread*]

Use to read data from the active communications line.

Text\$ is a string variable to which Access assigns the data it reads.

Timeout is an optional integer expression specifying a timeout in seconds. If you do not specify *timeout*, Access uses 30 seconds. If you specify zero (0), Access will not timeout.

Maxread is an optional integer expression specifying the maximum number of characters to read. *Maxread* must be between 1 and 255. If you do not specify *maxread*, Access uses 255.

READCOM reads characters from the active communications line until it encounters a linefeed character or reads *maxread* number of characters. READCOM always ignores carriage returns and returns data up to but not including the linefeed character.

If the READCOM command does not receive an entire line of data or does not receive the specified *maxread* number of characters, READCOM results in a “Match failure” error.

Example 1

```
READCOM data$      'Reads the next line of text.
                   'Waits at most 30 seconds.
```

Example 2

```
READCOM data$,0,10 'Reads at most the next 10 characters
                   'of data. Will not time out.
```

Errors

```
103    Match failure
104    Not connected
```

RENAME statement

RENAME Statement

RENAME *oldfilespec,newfilespec*

Use to change the name of a disk file.

Example

```
RENAME "data","data.bak"
```

Error

```
105    Cannot rename file
```

RUN Statement

RUN statement

RUN *scriptfilespec* [,*ignorefatal*]

Use to begin script file processing.

Use the Run command to start another script file from the current script file. When the second script file ends, processing resumes at the next line in the original script file. The second script file can initiate a third; up to four levels of script files can be active at one time.

Scriptfilespec is a string expression specifying the name of the script file to run.

Ignorefatal is an optional integer expression specifying whether Access should ignore fatal errors that occur. If *ignorefatal* is True (–1), fatal errors cause Access to stop processing the current script file and return to the original script file. The original script can then check the contents of the ERROR system variable to determine completion status. If *ignorefatal* is False (0) or you do not specify it, fatal errors cause Access to stop processing all script files.

See the COMMON statement for information on passing variables between different script programs.

Example

```
RUN "MAILPROG"
```

RUNPROG Statement

RUNPROG statement

RUNPROG *filespec* [,*clearscreen*]

Use to run a program.

Filespec is an MS-DOS .COM, .EXE, or .BAT file you want to run. *Filespec* may also be any DOS command. After Access executes the RUNPROG statement, the specified program is loaded into memory and Access is temporarily suspended. When you quit this program, control returns to Access and script processing resumes. Specify *filespec* as you would normally specify it to the MS-DOS Command Interpreter, including any arguments or switches.

Clearscreen is an integer expression indicating whether the Access screen should be cleared before the specified program takes control. If *clearscreen* is True (– 1) or is not specified, the screen will be cleared and then restored after program completion. Otherwise, the screen will not be cleared. This capability lets you develop script programs that run filter programs which do not prompt users for input, making the programs transparent to the user. If *clearscreen* is False (0), all standard output done through DOS will be suppressed to preserve the integrity of the screen.

Prompt is an integer expression indicating whether Access should issue the “Press a key to resume Access” message when the program completes. If *prompt* is True (– 1) or is not specified, the message is issued after program completion. If *prompt* is False (0), the message is not issued and script processing resumes immediately.

Note When you use the RUNPROG statement, Access erases the contents of the review buffers to provide space for the specified program.

Example

```
RUNPROG "FILTER A.IN B.OUT",0,0
```

SAVEVAR and LOADVAR statements

SAVEVAR and LOADVAR Statements

SAVEVAR *filenumber, var1* [, *var2, var3, ... varn*]

LOADVAR *filespec*

Use to save or load a list of variables in the form of a script program file.

Filenumber is an integer expression specifying a file you opened previously for output.

Var is a simple (non-array) variable or an array name. You cannot specify an array cell as a variable in the list; you can specify only simple variables or an array name.

The SAVEVAR statement opens the specified file and writes the variables in the script assignment format:

```
var = value
```


If you specify an array name in the *var* list, Access writes each cell. You can reload these variables later, by using a LOADVAR on the file Access has written. The SAVEVAR command is particularly useful for saving and restoring data between runs of a script file.

The LOADVAR statement runs the specified file.

Example

```
SAVEVAR 1,NAME$,COUNT,I
```

NAME\$ is a three-element array for generating the following file:

```
NAME$[1] = "JOHN"
NAME$[2] = "MARY"
NAME$[3] = "JIM"
COUNT = 4
I = 0
```

SBREAK Statement

SBREAK statement

SBREAK

Use to send a break signal to the communications line.

This statement sends a break signal to the active communications line.

SEEKREC and SEEKPOS Statements

SEEKREC and SEEKPOS statements

SEEKREC *filenumber,recordnumber*

SEEKPOS *filenumber,characterposition*

Use to position for reading from or writing to a file.

Filenumber is an integer expression specifying a previously opened file.

Recordnumber is an integer or long integer expression specifying the record number for positioning in the file. Numbering starts with record number 1. If you have specified a *reclen* value in the OPEN statement for this file, Access computes the character position, multiplying the recordnumber by the *reclen* value and

setting the file position accordingly. If you have not specified a *reclen* value, Access reads records through *recordnumber*.

Note This second procedure can be time consuming, especially when positioning within a large file.

Characterposition is an integer or long integer expression specifying the character position in the file.

If you attempt to position beyond the end of the file using the SEEKREC or SEEKPOS commands, Access positions to the end of the file.

Example 1

The following statement sets the position so Access will read or write the 99th record at the next read or write command:

```
SEEKREC 1,99
```

Example 2

This statement sets the position so Access will read or write the 2010th character at the next read or write command:

```
SEEKPOS 2,2010
```

SEND Statement

```
SEND [,list of expressions...] [;]
```

Use to send the result of the listed expressions to the communications line.

After Access sends the expression to the communications line, it sends a carriage return (ASCII decimal value 13) at the end of a string. If the expression is null, it sends only the carriage return. To suppress the sending of the carriage return, follow the string with a semicolon (;).

Example

```
MATCH "Enter your account number:"  
SEND "123456"
```

Error

```
104    Not connected
```

SENDFILE Statement

SENDFILE statement

```
SENDFILE filespec  
SENDFILE filenumber [,nbytes]
```

Use to send a file without protocol.

Filespec is a text file.

Filenumber is an integer expression specifying a previously opened input disk file. Access begins sending the file from the current file position.

Nbytes is an optional integer or long integer expression specifying the number of bytes to send. If you do not specify *nbytes*, Access prints the file from the current file position through the end of the file.

Example

```
SENDFILE "memo"
```

Errors

```
1      Insufficient memory  
101    Not a valid file  
104    Not connected  
108    Command canceled
```


SPEED system variable

SPEED System Variable

`SPEED = speedvalue`

Use to set or check communications line speed.

This variable contains the communications speed setting.

Example

```
SPEED = 1200
```

STOP statement

STOP Statement

`STOP`

Use to stop script file processing.

This statement stops only the current script file. If a higher level script file is running the current script file, control returns to the original file.

Example

```
IF NOT EXISTS(FILE$) THEN GOTO FAILED
'
FAILED: STOP
```

STR\$ function

STR\$ Function

`x$ = STR$(n)`

Use to return a string of characters representing the value of *n*, or vice versa.

The argument *n* is any valid numeric expression.

Example

```
n = 123
x$ = STR$(n) 'Sets x$ to the string "123"
```

SUSPEND Statement

SUSPEND statement

SUSPEND

Use to suspend processing of the script file and return control to the user's keyboard.

This statement is particularly useful when a user needs to interact with a host computer application and be able to resume script file processing at any time.

To resume script file processing, press the SCRIPT RESUME key.

TERMTYPE System Variable

TERMTYPE system variable

TERMTYPE = *setting*

Use to set or check terminal type.

Setting is an integer expression of 0, 1, or 2, corresponding to VT100, VT52, and TTY, respectively.

Example

```
TERMTYPE = VT100
```

TIME\$ System Variable

TIME\$ system variable

t\$ = TIME\$

Use to check or set the system clock.

TIME\$ returns a string in the form HH:MM:SS in 24-hour format, reflecting the current value of the system clock.

Setting TIME\$ will reset the system clock. TIME\$ may be set using any time format acceptable to the CVT function.

Example

```
TYPE "The current time is: ",TIME$
```

TYPE statement

TYPE Statement

TYPE [*list of expressions*] [;]

Use to display the results of specified expressions on the screen.

This statement displays the specified expressions on the screen, but does not send them to the communications line. After displaying the text, the TYPE command positions the highlight at the beginning of the next line. To “hold” the highlight at the end of the typed line, follow the string with a semicolon (;).

Note If the active communications line is set to VT100 or VT52 emulations, Access will respond to emulation sequences contained in TYPE statements.

Example

```
TYPE "You are online now!!"  
TYPE "Enter your choice: ";  
INPUT A$  
TYPE "You entered ",A$
```

UPC\$ function

UPC\$ Function

$U\$ = \text{UPC}\$(\text{stringexpression})$

Use to convert the specified string to uppercase.

This function returns the uppercase translation of *stringexpression*.

Example

```
U$ = UPC$("hello") 'Sets U$ to "HELLO"
```

VAL Function

VAL function

$n = \text{VAL}(x\$)$

Use to return the numeric value of string $x\$$.

This function instructs Access to return the positive or negative value of the string, skipping leading blanks or tabs. VAL stops converting values when it encounters a non-numeric character.

Example 1

$n = \text{VAL}(12)$ 'Sets n to 12

Example 2

$n = \text{VAL}("-456")$ 'Sets n to -456

Example 3

$n = \text{VAL}("78ABC")$ 'Sets n to 78

VALID Function

VALID function

$v = \text{VALID}(\text{code}, \text{string})$

Use to validate filenames and path specifications.

VALID returns True (– 1) if the specified string passes the validation criteria as specified by *code*. Otherwise, it returns False (0).

Code is an integer expression from the following table:

Code	System Constant	Meaning
1	PATHNAME	<i>String</i> must be an acceptable path specification. It does not check that this path actually exists, only that <i>string</i> is syntactically correct.
2	FILENAME	<i>String</i> must be a valid MS-DOS filename. No wildcard characters are allowed.
3	WILDFILE	<i>String</i> must be a valid MS-DOS filename. Wildcard characters are allowed.

Example 1

```
IF VALID(FILENAME,FN$) THEN GOTO OK
```

Example 2

```
IF VALID(PATHNAME,PATH$) THEN DRIVE$=PATH$ ELSE TYPE "Bad path"
```

WAIT statement

WAIT Statement

WAIT *number-of-seconds*

Use to suspend further processing of the script file until the specified number of seconds has elapsed.

You can specify the number of seconds in tenths of a second. For example, to specify half-second intervals, enter:

```
WAIT .5
```

This small delay time is useful when logging in to certain systems that require two carriage returns. Often, a slight delay is necessary between the two characters, in order for the host system to distinguish the characters.

Example

```
SEND ""
WAIT .2
SEND ""
```

Note A SEND command with a null string sends only a carriage return.

WHEN Statement

WHEN statement

WHEN DISCON GOTO *label*

WHEN CANCEL *prompt,list* GOTO *label*

Use to transfer control when the specified event occurs.

The WHEN DISCON command instructs Access to transfer control to *label* when the active communications line disconnects.

The WHEN CANCEL command allows you to control the canceling of script file processing. If the LOCK system variable is False, pressing the Esc key twice will cause the message “Enter Y to terminate script run, or N to continue” to appear. If you press Y, script file processing is terminated. The WHEN CANCEL command allows you to replace this message with your own message, *prompt*.

Prompt is a string expression specifying the message to appear on Access’ message line.

List is a string expression containing a list of valid responses. Each response is a single letter. All letters must be uppercase. The first letter in *list* is the “trigger” letter. If the user presses this trigger letter, Access will then transfer control to the specified label. Any script commands in progress at that time will automatically be canceled.

The WHEN CANCEL command is particularly useful in controlling the canceling of a task without needing to cancel the entire script file.

The events DISCON or CANCEL must be enabled and disabled using the statements:

event ON

event OFF

event HALT

When you set an event to ON, Access checks whether that event has occurred before continuing to process script statements. If the event has taken place, Access sets the event to HALT and transfers control to the specified label.

When you set an event to HALT, Access checks whether that event has occurred, but continues processing script statements until it encounters an event ON statement, then transfers control to the specified label.

When you set an event to OFF, Access does not check whether the event occurs, nor remember its occurrence if the event takes place.

If a script file runs another script file, all events are set to OFF. When the second script completes and control returns to the original script, events must be explicitly turned ON for them to be recognized.

Example 1

```
WHEN DISCON GOTO RECONNECT
DISCON ON
.
.
RECONNECT: TYPE "Line dropped. Reconnect? "
            INPUT$ ANSWERS
            IF ANSWERS = "Y" THEN CONNECT
```

Example 2

```
WHEN CANCEL "Enter Y to terminate, N to continue","YN" GOTO
STOPRUN
CANCEL ON
.
.
STOPRUN:
DISCONNECT
STOP
```

WHILE and WEND statements

WHILE and WEND Statements

WHILE *expression*

.

WEND

Use to execute a group of statements while a specified condition is True.

If *expression* is True (non-zero), Access executes the loop statements. Otherwise, it continues processing at the statement following the WEND. Every WHILE must have a corresponding WEND and vice versa.

Example

```
COUNT = 10
WHILE COUNT > 0
TYPE COUNT
COUNT = COUNT - 1
WEND
```

WINDOW Function

WINDOW function

result = WINDOW(*funcnumber*,*arguments...*)

Use to perform window operations.

All arguments to the WINDOW function are integers and the WINDOW function always returns an integer value.

Funcnumber is a function number. You can use system constants, associated with each function number, for clarity.

All function arguments are integer variables, as follows:

- *Axis* specifies a horizontal or vertical split. 0 or the system constant HOR specifies horizontal. 1 or the system constant VER specifies vertical.
- *Background* specifies background color.
- *Border* specifies border color.
- *Position* specifies the column or row position for the split.
- *State* specifies on or off. 0 or the system constant OFF specifies off. 1 or the system constant ON specifies on.
- *Winnumber* specifies the window number.

WSPLIT

funcnumber = 1 = WSPLIT

newwin = WINDOW(WSPLIT,*winnumber*,*axis*,*position*)

Use this function to split a window. You can have up to eight windows. WINDOW returns False (0) if Access cannot split the window (because you already have eight windows, or the window is too small to split, for example). Otherwise, it returns the number of the new window.

WCLOSE

```
funcnumber = 2 = WCLOSE
result = WINDOW(WCLOSE,winnumber)
```

Use this function to close a window. WINDOW returns False (0) if Access cannot close the window (because you have only one window). Otherwise, it returns True (-1). To close all windows, repeat WCLOSE on window 1 until the function returns False. Attempting to close a nonexistent window generates an “Illegal function call” error message.

WASSIGN

```
funcnumber = 3 = WASSIGN
result = WINDOW(WASSIGN,winnumber)
```

Use this function to assign the active communications line to a window. *Result* always returns True (-1).

WSCRIPT

```
funcnumber = 4 = WSCRIPT
result = WINDOW(WSCRIPT,winnumber)
```

Use this function to assign script input and output operations to a window. WINDOW always returns True (-1). Access uses the specified window for script input and output operations. The script TYPE, POS, CLW, and INPUT commands all operate within this window. To segregate communication traffic from script input/output, you need to have two windows, one assigned to the communications line, the other to the script.

Note This window will respond to VT100 sequences.

WPAINT

```
funcnumber = 5 = WPAINT
result = WINDOW(WPAINT,winnumber,background,
foreground,border)
```

Use this function to set window colors. WINDOW always returns True (- 1).

WBORDER

```
funcnumber = 6 = WBORDER
state = WINDOW(WBORDER,winnumber)
result = WINDOW(WBORDER,winnumber,state)
```

Use the first function to determine if borders are on or off. WINDOW returns True (- 1) if borders are on in the specified window. Otherwise, it returns False (0). Use the second function to turn borders on or off. WINDOW returns False (0) if there is no space for borders; otherwise, it returns True (- 1).

WNUMBER

```
funcnumber = 7 = WNUMBER
number = WINDOW(WNUMBER)
```

Use this function to check the number of windows on the screen. WINDOW returns the number of windows.

WSIZE

```
funcnumber = 8 = WSIZE
size = WINDOW(WSIZE,winnumber,axis)
```

Use this function to check the number of rows or columns in a window. WINDOW returns the horizontal or vertical size of the specified window, including the border area. To determine the area available for display in a bordered window, subtract 2 for vertical adjustment and 3 for horizontal adjustment if borders are on in the window.

Example 1

```
A:  IF WINDOW(WCLOSE,1) THEN GOTO A 'Close all windows
```

Example 2

The following statements split window 1 and assign the script to the new window:

```
newwin = WINDOW(WSPLIT, 1, HOR, 10)
result = WINDOW(WSCRIPT, newwin)
```

WRITE statement

WRITE Statement

WRITE *filenumber*[,*stringvar*] [;]

Use to write data to a previously opened disk file.

Filenumber is an integer expression specifying a previously opened disk file.

Stringvar is a string expression that Access writes to a file. Access terminates the string with a carriage return/linefeed pair, unless a semicolon (;) follows the string. If you do not specify *stringvar*, Access writes only a carriage return/linefeed pair to the file.

If you have used a *reclen* value in the OPEN command, Access writes only *reclen* characters to the file. If the length of the string is less than *reclen*, Access writes blanks to the file until *reclen* characters have been written.

Example 1

```
WRITE 1,LINES
```

Example 2

```
WRITE 1,DATAS;
```


22 Messages

This chapter lists all the messages that may appear in the message line when you use Microsoft Access. The list is in alphabetical order, and includes a description of the probable cause of each message and possible responses.

Note You can always press the Esc key to cancel a command when a message appears requiring action from you.

Already connected

- *You tried to connect a communications line or X.PC channel that is already connected.*

Disconnect the communications line using the Disconnect command before you attempt to use the line again.

Already learning — cannot learn login

- *You chose Yes in the Connect “learn login” command field after previously carrying out the Learn command to open a file.*

Close the learn file using the Learn command and start again.

At line number

- *You have asked the Editor to select a character using the Goto command.*

The Editor continues to show its progress until it reaches the specified line. No action required.

Bad file mode

- *(Script) You tried to write to a script file opened for input, or to read from a script file opened for output.*

Note the error location that accompanies the message, edit the script to correct the problem, then run the script again.

Cannot border window

- *You chose Yes in the Window Options “borders” command field but the window is too small to accommodate borders.*

Increase size of the window to at least three lines long and four columns wide, then start again.

A

B

C

Cannot delete file

- *You tried to delete a file using the Transfer Delete command, but Access is unable to do so for one of the following reasons: the file is not on the disk; the filename is not valid; the disk is write-protected.*

Make sure you have the correct disk in the drive, and have entered the correct filename, then start again. If the disk is write-protected, you must remove protection from the disk before you can delete the file.

Cannot dial without modem

- *You dialed a telephone number without first supplying the modem name in the Options "modem name" command field. If you have more than one communications line, the current active line may not be the line to which the modem is connected.*

Enter a valid modem name in the field. If you have another communications line, make sure the line to which your modem is connected is the active line.

Cannot exceed 100 addresses on the Desk

- *(Mail) You are using the Compose Create Address command to try to store more than 100 addresses on the Desk.*

Choose the Compose Stamp command to post the message with the current addresses to the Outbox. Or, choose the Compose Delete Address command to delete some addresses.

Cannot find issue requested

- *(Quotes Historical or Search Company commands) The company you requested is not in the database, or line noise may have distorted your request.*

To determine if the problem is line noise, repeat your request; or, disconnect the current line and reconnect to see if you can get a better line.

Cannot read file

- *You requested a filename, but Access was unable to find the file on the disk.*

Make sure you have the correct disk in the drive, and have entered the correct filename, then start again.

Cannot rename file

- *You tried to rename a file, but Access is unable to do so for one of the following reasons: the new name already exists; the filename is not valid; the disk is write-protected; you tried to rename across disks.*

Choose a different name for the file. If the disk is write-protected, you must remove protection from the disk before you can rename the file.

Cannot update ACCESS.INI file

- *You carried out the Quit command, but a disk hardware error prevented Access from updating the ACCESS.INI file with current settings.*

Examine your disk and disk drive, correct any problem, and try the command again.

Cannot update Phonebook

- *You pressed Y in response to the message "Press Y to update Phonebook" but Access cannot carry out your request because the disk has insufficient space for the changes.*

Start a new session with a disk containing more free space and enter the changes again.

Cannot write file

- *You tried to save a file, but the disk is either full or write-protected.*

Check the available space and write-protection of the disk that caused the message. Save the file on another disk, either by changing the default drive using the Transfer Options command, or by inserting a new disk in the drive.

Capturing

- *You are reviewing data and pressed the CAPTURE ON/OFF key to capture selected data.*

Access is capturing. No special action is necessary.

Command too long

- *The response you entered in the command field is too long.*
- Shorten the response.

Company not found

- *(Search Database DJNews or Search Database SEC-Disclosure commands) The company you requested is not in the database, or line noise may have distorted your request.*

To determine if the problem is line noise, repeat your request; or, disconnect the current line and reconnect to see if you can get a better line.

Company not listed in Media General

- *(Search Company or Search Database MedGen commands) Media General contains information on over 3200 companies and 180 industries. The company you requested is not in the database, or line noise may have distorted your request.*

To determine if the problem is line noise, repeat your request; or, disconnect the current line and reconnect to see if you can get a better line.

Connect failure

- *You carried out the Connect command, but Access is unable to connect to the host because the telephone number is incorrect, or Access received a busy signal or no answer.*
Make sure the telephone number is correct, then try again.

Connected. Press <Ctrl-f m> to exit to COMMAND:

- *You are controlling Access from a remote terminal.*
Press Ctrl-f m to display the Session menu on the remote terminal screen.

Connection failure...Enter Y to reconnect, or N to return

- *(Mail) You are using a Send or Receive command that has attempted to establish a connection to a mail vendor, but has failed.*
Press Y to attempt a connection again. Press N to continue command processing or return to the Mail command menu.

Connection lost...Enter Y to reconnect, or N to return

- *(Mail) You are using a Send or Receive command that has lost a connection to a mail vendor.*
Press Y to attempt a connection again. Press N to continue command processing or return to the Mail command menu.

Control terminated by local operator

- *Control of Access switched from the remote calling computer to the local computer because the local computer user terminated the remote operation by pressing the Esc key.*
No action required.

D**Date out of range**

- *(Variety of stock price databases) You specified a date that is earlier or later than the range of dates for which CompuServe has data for that company.*
Specify a different date and try again.

Date requested not found

- *(Quotes Averages commands) The date requested was either not a trading day (like Saturday) or earlier than the range of dates for which Dow Jones has data.*
Specify a different date and try again.

Departure city not identifiable

- *You requested a city for which OAG has no list, or line noise may have distorted your request.*
To determine if the problem is line noise, repeat your request; or, disconnect the current line and reconnect to see if you can get a better line.

Destination not identifiable

- *You requested a city for which OAG has no list, or line noise may have distorted your request.*

To determine if the problem is line noise, repeat your request; or, disconnect the current line and reconnect to see if you can get a better line.

Dial number and place handset in cradle

- *You chose the Connect command and are using an acoustic coupler.*

Dial the telephone number of the host you want, then place the phone handset in the cradle.

Disconnect failure

- *You chose the Disconnect command, but the modem carrier signal indicates you are still connected, or the X.PC driver was unable to clear the call.*

Check that you have set your modem switches properly. If you are using a standalone modem, check that you are using a properly configured RS-232-C cable. For information on modem switches and RS-232-C cables, see Appendix B, “Modems and Hardware.”

Disk error

- *The IBM Disk Operating System informed Access of an error on the disk.*

If the disk is write protected, consider removing protection from the disk. Or, reinsert the disk to make sure you have done so correctly, or try a new disk. Then retry the command.

Disk full

- *The disk has no more room to save files.*

Review the files on disk and delete files you don't need, using the Transfer Delete command. If you do not want to delete any files, exchange this disk for one with more space available.

Duplicate dimension

- *(Script) You gave two script DIM statements for the same array.*

Note the error location that accompanies the message, edit the script to correct the problem, then run the script again.

Duplicate label

- *(Script) You defined the same label more than once in the script file.*

Note the error location that accompanies the message, edit the script to correct the problem, then run the script again.

E**Edit document or press Cancel to use menu**

- *The Editor is waiting for you to enter text at the keyboard.*

If you want to enter new text to your document, type it in. If you want to use Editor commands to edit existing text, press the CANCEL key to activate the command menu, or use the mouse to select the commands.

Editor does not exist as specified

- *(Mail) You have used the Modify Settings command and have entered an editor filename which does not exist.*

Choose the Modify Settings command. Type a correct filename in the “mail editor filename” field.

Edits to this document will be lost. Enter Y to proceed

- *You have asked the Editor to end the editing session or load a new document without first saving the current document.*

If you want to save the current document, press N or press the CANCEL key to return to the command menu. If you do not want to save the document, press Y.

End mark cannot be edited

- *You tried to use a Phonebook command to change an entry, but you selected only the Phonebook end mark.*

Select a Phonebook entry and start again.

End of directory. Press Esc for menu

- *You have reached the end of the directory and can go no further.*

Press the Esc key to return to the Session menu.

End of file. Press Esc for menu

- *You reached the end of the file and can go no further.*

Press the Esc key to return to the Session menu.

Enter character

- *The active command field requires a character.*

Type the appropriate alphanumeric, caret (^), or bar (|) character. See the Modify Settings command in Chapter 20, “Session Menu and Phonebook Commands.”

Enter date

- *You are starting Mail and have set a system date earlier than May 1, 1985.*

Type the current date in mm/dd/yy format to reset the system date.

Enter DOS command

- *You chose the Run Program command.*

Type a program name or a DOS command. Your entry can include a disk drive or directory, and any legal command line switches.

Enter drive or directory

- *The Transfer Options “drive” command field requires a drive and/or directory name.*

Type a drive letter and/or directory name in the correct format for your operating system.

Enter filename

- *The active command field requires the name of a file.*

Type a filename.

Enter filename or select from list

- *The active command field requires the name of a file.*

Type a filename or press any direction key to select a file from the directory on the default disk drive.

Enter letter from A through Z

- *You pressed the RECORD ON/OFF key.*

Type a Quickey letter, or press the Esc key to cancel.

Enter letter from A through Z or select from list

- *The Modify Quickey “letter” command field requires a letter.*

Type a letter or press any direction key to select from the list of Quickeys and their contents.

Enter message center name

- *You are installing Mail and must enter an initial message center name.*

Type a message center name following DOS filename rules.

Enter message center name or select from list

- *You are starting Mail, and the message center used when you last used Mail is not available.*

Type a message center name following DOS pathname or filename rules. Or, press a direction key in the “using message center” field to display a list of valid message centers. Select a message center from the list using the direction keys.

Enter modem name or select from list

- *The Options “modem name” command field requires the name of the modem you are using.*

Press any direction key to select your modem name. If you are using an acoustic coupler or manual dial modem, select “Acoustic.” If you are using a direct connection, select “None.”

Enter N for next page

- *You displayed a directory or file containing more than one screenful of information.*

Press N (for Next) to display the next screen of information, or press the Esc key to return to the Session menu.

Enter name

- *You are using the Insert or Modify Settings command from the Phonebook menu.*

Type a name from one to eight characters long.

Enter name and press ENTER

- *You are using the Install procedure for direct connection to a host.*

Type the name of the host, from one to eight characters. Then press the ENTER key.

Enter name or select from list

- *The active command field requires a host name.*

Type the name of the intended host, or press any direction key to select from the Phonebook. Leave the field blank if you want Access to use current communications settings.

Enter number

- *The active command field requires a number.*

Type a number.

Enter number and press ENTER

- *You are using the Install procedure.*

Type a number from the list on the screen. Then press the ENTER key.

Enter number, or D for default

- *The Window Options “margins” command field requires a response.*

Type a number or press the letter “d” for default. The default is the rightmost column of the specified window.

Enter number or L for learn

- *The Modify Settings “prompt count” command field requires a response that enables Access to pace transmissions during file sending.*

See the Modify Settings command in Chapter 20, “Session Menu and Phonebook Commands,” for information on filling in this command field.

Enter number or select from list

- *The active command field requires a number.*

Type a number or press any direction key to display a list of possible responses.

Enter O to overwrite or A to append

- *You typed an existing filename in the Transfer Capture “filename” command field and carried out the command.*

Press O to overwrite the contents of the existing file with the new captured correspondence or A to append to the existing file.

Enter password:

- *You dialed a computer running Access. Because Access is in the remote state and the Options “login password” command field contains a password, you must enter this password in order to continue the session.*

Type the correct password.

Enter pathname

- *You are using the Modify Settings command and are in the “mail editor filename” field.*

Type a DOS pathname or filename specifying the editor you want to use with Mail.

Enter phone number

- *The Connect “phone number” command field requires the host telephone number you want to dial.*

Type the telephone number of the intended host. Or, type *none* for direct connection or to communicate with your modem.

Enter text

- *The active command field requires text.*

Type text.

Enter text and press ENTER

- *You are using the Install procedure.*

Type the information requested. Then press the ENTER key.

Enter text or select from list

- *(Mail) The active command field requires text.*

Type text or select text from the list using the direction keys.

Enter Y for another address using same vendor and service, or N to return

- *(Mail) You are using the Compose Create Address command to create an address for a particular vendor and service.*

Press Y to create another address using the same vendor and service. Press N to return to the Compose command menu.

Enter Y to add name to Phonebook or N to continue

- *You entered a host name that is not in the Phonebook.*

Press Y to save the host name, telephone number and current communications settings in the Phonebook. Press N to leave the Phonebook unchanged.

Enter Y to change, N to ignore, or Cancel to end replace

- *You have asked the Editor to confirm before replacing the selected text.*

To replace the text, press Y. To ignore the text and move on to the next occurrence, press N. To cancel further replacement, press the CANCEL key.

Enter Y to confirm

- *Access requires confirmation before carrying out a command.*

Press Y to confirm your decision to carry out the command.

Enter Y to continue, N to cancel

- *(Mail) You are using the View command and have displayed a full window of new message information.*

Press Y to display the next window of information. Press N to display the next message selected in the View command.

Enter Y to delete from “location,” or N to cancel

- *(Mail) You are using a Compose or Transfer command which will delete a message, address, or content from a message center location.*

Press Y to delete the message. Press N to cancel the command.

Enter Y to disconnect “hostname” on comm. line or N to remain connected

- *You have chosen the Quit command, but you still have an active connection. Access is asking you to confirm your decision to quit and to disconnect.*

Press Y to disconnect. Press N to remain connected. Press Esc to cancel the Quit command.

Enter Y to overwrite file

- *You entered an existing filename in the Learn “script filename” command field.*

Press Y to overwrite the file, or press the Esc key to cancel.

Enter Y to Receive from “service,” or N to continue

- *(Mail) You have used a Receive command, and have the option of using a Receive command for the specified vendor.*

Press Y to start the operation. Press N to continue command processing or return to the Mail command menu.

Enter Y to retry access to disk

- *Access encountered an error when directed to a disk.*

Check that you loaded your disk properly, then press Y to try again.

Enter Y to retry access to “filename”

- *Access cannot find the file you requested.*

Check that you have entered the filename correctly and that you have properly inserted the disk containing the file. If the disk is write-protected, consider removing protection from the disk. Press Y to try again. Press the Esc key to cancel the command.

Enter Y to retry printer or N to cancel

- *You tried to print but the printer is not ready.*

Make sure the printer is set up properly, then press Y to print or N to cancel.

Enter Y to return

- *(Mail) You are using the View command and have displayed the last full window of new message information.*

Press Y to return to the Mail command menu.

Enter Y to Send to “service,” or N to continue

- *(Mail) You have used a Send command, and have the option of using a Send command for the specified vendor.*

Press Y to start the operation. Press N to continue command processing or return to the Mail command menu.

Enter Y to terminate file transfer or N to continue

- *You pressed the Esc key during a file transfer.*

Press Y to terminate the file transfer. Press N to continue the file transfer.

Enter Y to terminate printing

- *You pressed the Esc key while you were printing.*

Press Y to terminate printing. Press the Esc key to cancel.

Enter Y to terminate remote control or N to continue

- *You pressed the Esc key while Access was responding to control from a remote computer.*

Press Y to transfer control from the remote computer to your local microcomputer. Press N to continue remote control.

Enter Y to terminate script run or N to continue

- *You pressed the Esc key during script file processing.*

Press Y to stop script file processing. Press N to continue processing the script file.

Enter Y to update Phonebook permanently or N to keep old Phonebook

- *You chose the Session command from the Phonebook menu after having made changes to Phonebook entries. Or, you chose Quit after modifying settings or Quickeys.*

Press Y to save the changes you made to the Phonebook or press N to leave the Phonebook unchanged.

Enter Y when program disk is ready

- *You are using a computer with only floppy-disk drives, and you chose the Run Program command, typed a program name or DOS command, then pressed the ENTER key. Access is waiting for you to insert the correct disk.*

If you typed a DOS internal command (such as DIR), or if the correct disk is already in the appropriate floppy-disk drive, press Y to continue.

If you need to change disks, insert the disk containing the program you want to run, then press Y to continue.

Enter Y when ready or N to bypass Install

- *You are using a computer with floppy-disk drives, and are either running Access for the first time or have requested the Install procedure.*

Insert the Information Services and Utilities disk in drive B and press Y. Press N to bypass the Install procedure.

Excessive line noise, or database not found

- *Line noise has distorted your request. Or, the service has removed the database or changed the method of retrieving information from it.*

To determine if the problem is line noise, repeat your request; or, disconnect the current line and reconnect to see if you can get a better line.

In case the service has changed the way you get information from the database, try using the Bypass command to retrieve the information directly. If the database has been removed, you cannot obtain information from it. In either event, it is highly likely that there is an updated Custom Menu available that will accommodate the changes in the service. See Appendix E, "Updating Custom Menus," for instructions on obtaining updates.

Excessive retries error

- *The XMODEM file transfer failed due to line noise or host problems.*

Disconnect the line, redial, and try again.

Expression too complex

- *(Script) You used too many nested functions or intermediate calculations in a script statement.*
Simplify the statement.

File already exists

- *In the Editor, you have tried to rename the active file with the name of a file that already exists on a disk.*
If you can choose another name for the active file, use it. Otherwise, delete the file on the disk before renaming the active file again.

File does not exist as specified

- *(Mail) You are using the Transfer Import command and the file specified in the “from filename” field does not exist.*
Choose the Transfer Import command and enter the correct filename.

Field has too many words

- *You have typed too many words in the “text” or “with text” fields of the Replace and Search commands in the Editor.*
Use fewer words in the field.

File not open

- *(Script) You specified an unopened file number in a script statement.*
Note the error location that accompanies the message, edit the script to correct the problem, then run the script again using the Run Script command.

FOR without NEXT

- *(Script) You used a FOR statement without a subsequent NEXT statement in a script file.*
Close the FOR loop with the NEXT statement.

From address not understandable. Continuing request...

- *(Mail) You are using the Compose Create Reply or Compose Modify Reply command, and have selected a message from the Inbox whose From address cannot be understood as the initial address for your reply.*
Choose the Compose Create Address command to create an initial address.

Hang up telephone. Enter Y to continue

- *You are using the Disconnect command with an acoustic coupler.*
Hang up the phone and press Y to continue.

F

H

Help file not available

- *You have asked the Editor for help and it cannot find the Help file on the disk.*

Make sure the Editor software disk is in the startup drive (the drive from which the Editor was started). Then try the Help command again.

Illegal function call

- *(Script) You used an invalid value or a value out of range in a script statement or function call.*

Note the error location that accompanies the message, edit the script to correct the problem, then run the script again using the Run Script command.

Index active

- *(Script) You used an index variable in a script FOR/NEXT loop that you already used in an outer loop.*

Note the error location that accompanies the message, edit the script to correct the problem, then run the script again using the Run Script command.

Information not available

- *(Search Company command) The company you requested is not in the database, or line noise may have distorted your request.*

To determine if the problem is line noise, repeat your request; or, disconnect the current line and reconnect to see if you can get a better line.

Input past end

- *(Script) You used the script READ statement when there is no more data to be read.*

Use the EOF function to detect the end of the file before reading.

Insufficient memory

- *Access cannot carry out the current command because no more memory is available. Or, in the Editor, you have made extensive changes to a document without saving the changes, and the Editor has run out of free workspace.*

Windows, open files, Phonebook entries, and Quickey assignment script file processing all use space in memory. To free up space in memory, either close a window or file, or delete a Phonebook entry or Quickey assignment.

In the Editor, use the Transfer Save command to save the active document, then continue the editing session.

Invalid flight number

- *You entered an inappropriate flight number.*

Enter a line number (usually 1 through 9) from the numbered list of flights displayed on your screen. Do not enter the airline's flight number.

Label not found

- *(Script) You referred to a nonexistent label in a script file.*

Note the error location that accompanies the message, edit the script to correct the problem, then run the script again.

List is empty

- *You pressed a direction key to display a list of possible responses for a command field, but no list exists.*

Type the response in the command field.

Location limits exceeded by XXX messages

- *(Mail) You are using a command to try to store more than 100 messages in the Inbox, Outbox or Folder.*

Choose the command again and specify a smaller number of messages. Or, choose the Transfer Delete command to delete some messages.

MATCHBEGIN without MATCHEND

- *(Script) You used a MATCHBEGIN statement without a subsequent MATCHEND statement in a script file.*

Close the MATCHBEGIN with the MATCHEND statement.

May exceed disk space by XXXXXX bytes...Enter Y to continue, or N to cancel

- *(Mail) You are using a command that will create a message, address or content file and may not have enough disk space.*

Consider using the Transfer Delete command to free more disk space. If the exceeded space is greater than or equal to 5120 bytes, continuing the command is not advised. Press Y to continue the command. Press N to cancel the command.

Message center exists...Enter Y to switch centers, or N to cancel

- *(Mail) You are using the Modify Settings command and have entered an existing message center name.*

Press Y to switch to the chosen message center. Press N to remain in the same message center.

L

M

Message content is binary and cannot be displayed

- *(Mail) You are using the Print or View command to display a message whose content is binary. Binary content cannot be displayed.*

Use the Transfer Import command to copy and rename the binary message, then choose the Print or View command again.

Message content is binary and cannot be edited

- *(Mail) You are using the Compose Modify Draft command to edit a message whose content is binary. Binary content cannot be edited.*

Use the Transfer Import command to copy and rename the binary message on the Desk, then edit the message.

Modem does not support voice/data

- *Your modem does not allow switching from voice to data communications.*

No special action is necessary.

Modem response:

- *You carried out the Connect command and Access displays the response from your modem.*

No special action is necessary.

N**NEXT without FOR**

- *(Script) You used a NEXT statement without a previous FOR statement in a script file.*

Begin the loop with the FOR statement.

No addresses found

- *(Mail) You are using the Compose Stamp command to post a message to the Outbox, but you have not created any addresses on the Desk for the message.*

Choose the Compose Create Address command to create addresses.

No communication devices found

- *You tried to use Access without an asynchronous communications adapter or internal modem.*

Install an asynchronous communications adapter in your micro-computer before trying to use Access.

No content found

- *(Mail) You are using the Compose Stamp command to post a message to the Outbox, but you have not created any content on the Desk for the message.*

Choose the Compose Create Draft command to create content.

No data to review

- *You pressed a direction key to review data but no data is in the review buffer.*

No special action is necessary.

No edit to undo

- *You tried to carry out the Undo command from the Phonebook menu without having made any changes to Phonebook entries.*

Press the Esc key to cancel the command.

No end quote

- *(Script) You used an open quote in a script file without a corresponding end quote.*

Note the error location that accompanies the message, edit the script to correct the problem, then run the script again using the Run Script command.

No fare information available on this city pair

- *You specified a departure and destination city for which OAG has no fare information.*

Specify a different departure or destination, and try again.

No help file found

- *You chose the Help command, but Access could not find the Help file on the disk.*

(Access) Insert the Access Utilities disk in drive B, or copy the ACCESS.HLP file to the \MSTOOLS directory on your hard disk, then try again.

(Mail) Insert the Access Mail disk in drive B, or copy the MAIL.HLP file to the \MSTOOLS directory on your hard disk, then try again.

No Install file found

- *You started Access for the first time, or tried to run Install again by typing access /install, but Access was unable to find the Install program on the disk.*

Insert the Access Utilities disk in drive B, or copy the ACCESS.INI file from the Access Utilities disk to the \MSTOOLS directory.

No limitations

- *You requested "Conditions" from the Fares and Schedules Fares menu, but no limitations exist.*

No action is required.

No messages awaiting a Receive from “service”

- *(Mail) You are using a Send command, and have no messages to send to that service.*
No action is required.

No messages awaiting a Send to “service”

- *(Mail) You are using a Receive command, and have no messages awaiting that operation for that service.*
No action is required.

No modem file found

- *You are running the Install procedure or are changing the modem name in the Options command, and Access is unable to find the modem file on the disk.*
Insert the Access Information Services and Utilities disk in drive B, or copy the ACCESS.MDM file from the Access Information Services and Utilities disk to the \MSTOOLS directory on your hard disk.

No Phonebook file found

- *The Phonebook file is not on the disk.*
Load the disk containing the Phonebook file and try again.

No reply to voice mode request. Enter Y to continue

- *You issued a voice mode request to another microcomputer but this computer has not responded.*
Press Y to continue your data communications session.

No schedule information available on this city pair

- *You specified departure and destination cities for which OAG has no schedule information.*
Specify a different departure or destination and try again.

Not a unique name

- *You chose the Session command from the Phonebook menu, but the Phonebook contains more than one entry with the same name.*
Access does not accept duplicate Phonebook entry names. Use the Modify Settings command to change the name of one of the duplicate entries.

Not a valid character

- *You entered too many characters, or an inappropriate character, in the command field.*
Enter the correct characters. See Chapter 20, “Session Menu and Phonebook Commands,” for details.

Not a valid color number

- *You entered an incorrect number in one of the Window Options “color” command fields.*

Press any direction key to display color number definitions and choose one from the list.

Not a valid communications line

- *You entered a communications line that does not exist on your microcomputer.*

Enter the number of a valid communications line.

Not a valid date

- *You entered a date using an incorrect format.*

Use a date format of mm/dd/yy or one of the date formats acceptable to the CVD function. See the CVD function in Chapter 21, “Microsoft Access Script Commands,” for information on date formats.

Not a valid drive or directory

- *You entered an incorrect drive name or directory in a command field.*

Enter the drive name and/or directory in the correct format for your operating system.

Not a valid entry

- *You entered an invalid response in a command field and tried to carry out the command.*

Enter the correct response and try again.

Not a valid file

- *You entered an invalid filename, or a filename that does not exist.*

Correct your entry and try again.

Not a valid message center...Settings remain unchanged

- *(Mail) You have used the Modify Settings command and have entered a message center name which does not exist. Mail ignores any setting changes you have made.*

Choose the Modify Settings command. Press a direction key in the “for message center” field to display a list of valid message centers. Select a message center from the list using the direction keys.

Not a valid modem name

- *You entered an incorrect name in the Options “modem name” command field.*

Press any direction key to display a list, then select an appropriate response.

Not a valid name

- *You have entered a host name using more than eight characters, or having an invalid character. Or, you specified a host name that is not in the Phonebook.*

Enter a valid name.

Not a valid number

- *The response in the active command field contains a non-numeric character or a number outside the acceptable range.*

Enter a valid number in the command field.

Not a valid number list

- *You entered a list of numbers in the command field using an incorrect format.*

Separate numbers in a list or range with a comma (,), a dash (-), or a colon (:). For example, *1,3,5-10* indicates items 1, 3, and 5 through 10.

Not a valid option

- *You pressed a letter that does not correspond to any of the menu options displayed.*

Check the menu displayed for the option you want and press the first letter of your choice.

Not a valid password

- *You called a remote Access computer and entered a password that does not correspond to the response in the Options “login password” command field.*

Correct the password.

Not a valid path

- *You entered a path using an incorrect format.*

Use the IBM Disk Operating System formatting conventions to enter a path.

Not a valid selection

- *(Mail) You have entered an invalid selection in the previous message, address, vendor or list command field.*

Choose the command again and enter the correct selection.

Not a valid selection list, or list too long

- *(Mail) The active command field requires a list of number ranges and you have specified either an invalid list, or a list containing more than 100 ranges or 255 characters.*

Enter either a valid or smaller list of number ranges.

Not a valid speed

- *You entered an inappropriate baud rate.*

Press any direction key to select from a list of valid speeds.

Not a valid state

- *You entered an inappropriate state abbreviation.*
Correct your entry and try again.

Not a valid syntax

- *(Script) You used a script command in the wrong format.*
Note the error location that accompanies the message, edit the script to correct the problem, then run the script program again using the Run Script command. See Chapter 21, “Microsoft Access Script Commands,” for more information on script command format.

Not a valid time

- *You entered a time using an incorrect format.*
Use a time format of hh:mm or one of the time formats acceptable to the CVT function. See the CVT function in Chapter 21, “Microsoft Access Script Commands,” for information on time formats.

Not a valid window

- *You entered a number for a nonexistent window.*
Enter a valid window number.

Not a valid window split

- *You tried to split a window too close to an existing window boundary.*
Change your entry and try again.

Not a valid X.PC channel

- *You specified an invalid X.PC channel.*
You must specify an X.PC channel between 1 and 15. See Appendix D, “Using X.PC Connections,” for more information on specifying an X.PC channel.

Not available on S&P

- *(Search Company command) The company you requested is not in the database, or line noise may have distorted your request.*
To determine if the problem is line noise, repeat your request; or, disconnect the current line and reconnect to see if you can get a better line.

Not connected

- *You tried to carry out a command, such as Transfer Send, that requires a connection to a host.*
Connect to a host, using the Connect command. Then try the command again.

O

Nothing found

- *(Quotes Lookup command) The company you requested is not in the database, or line noise may have distorted your request.*
To determine if the problem is line noise, repeat your request; or, disconnect the current line and reconnect to see if you can get a better line.

P

Overflow

- *(Script) You assigned too large a value to a variable. For example, you may have assigned a long number value (such as a date) to an integer variable.*
Note the error location that accompanies the message, edit the script to correct the problem, then run the script program again using the Run Script command.

Password timeout

- *You called a remote Access computer and have not entered the required password within the allowed time limit.*
Try the call again and be prepared to enter your password.

Pick up Handset

- *You have sent a voice mode request to another microcomputer and have received acknowledgement.*
Pick up your handset within five seconds of seeing the message, or you will lose the connection.

Press a key to resume Access

- *You chose the Run Program command, then ran a DOS command or program. Access waits for you to press a key before resuming your work.*
Press any key. Access resumes where you left it with connections still intact.

Press ENTER to continue

- *You are using the Install procedure and are ready to move to the next screen.*
Press ENTER to display the next Install screen.

Primary addressee missing for “service”

- *(Mail) You are using the Compose Stamp command to post a message to the Outbox, but you have created only CC addresses on the Desk for MCI.*
Choose the Compose Modify Address command to modify an existing CC address to a primary (“To”) address. Or, choose the Compose Create Address command to create a primary address.

Printing

- *You are reviewing data and pressed the PRINT ON/OFF key, or you chose the Print Printer command from the Phonebook menu.*

No action is required.

Protocol timeout error

- *Access did not receive a response from the host after sending a block of data during an XMODEM file transfer.*

Carry out the file transfer again.

Remote login in progress...

- *A remote computer called up Access and is entering the necessary login password.*

No action is required.

Saving document...

- *You have asked the Editor to save the current document using the Transfer Save command.*

The Editor displays the message until the entire document has been saved. No action required.

Scrap is empty

- *You tried to insert material from scrap, but the scrap is empty.*

No action is required.

Script terminated

- *(Script) You canceled script file processing.*

No action is required.

Search text not found

- *The Editor did not find the text you had specified when it searched the document.*

If you expected the text to be present, try the search again, but in a different direction. Make sure that you typed the search text correctly, that the case of the letters in the search text is correct, and that you have correctly specified whether you are looking for a whole word or part of a word.

Searching...

- *You have asked the Editor to search for specified text using the Search or Replace command.*

The Editor continues to display the message until the text is found, or the end of the document has been reached. No action required.

R

S

Select option

- *Access has displayed a list of command field options.*

Choose an option by pressing the spacebar or BACKSPACE key, or by pressing the first letter of your choice.

Select option or choose Session to return to Session menu

- *You are in the Phonebook menu.*

Select a Phonebook entry by pressing any direction key, then choose a command. Or, choose the Session command to return to the Session menu.

Select option or type command letter

- *Access has displayed a menu of command options.*

Choose an option by pressing the spacebar or BACKSPACE key and then pressing the ENTER key. Or, press the first letter of your command choice.

Service not available for date chosen

- *You have requested a date for which service is not available between departure and destination cities.*

Choose a different date, and try again. Or, consult a different airline.

Show number must be between 1 and 4

- *(Read Analysis W\$W command) Dow Jones offers only the four most recent shows, so you must enter a number between 1 and 4.*

Correct your entry and try again.

Start date later than end date

- *You have specified a start date that is later than the end date of a date range.*

Correct the start date and try again.

String too long

- *(Script) You used a script string constant containing more than 255 characters.*

Note the error location that accompanies the message, edit the script to correct the problem, then run the script again using the Run Script command.

Subscript out of range

- *(Script) You referenced a script array element with a subscript that is outside the dimensions of the array.*

Note the error location that accompanies the message, edit the script to correct the problem, then run the script again using the Run Script command.

Switch to voice mode. Enter Y to confirm

- *You pressed the VOICE key to send a voice mode request to another microcomputer.*

Press Y to confirm your request. Press the Esc key to cancel.

Terminated by host

- *The host has terminated the file transfer.*

No action required.

Terminated by local operator

- *You pressed the Esc key to terminate the file transfer.*

No action required.

Termination in progress

- *You pressed Y to confirm termination of file transfer. Access is instructing the other computer to terminate the file transfer.*

No action required.

The scrap is empty

- *You have asked the Editor to insert text from the scrap when nothing is in the scrap.*

Copy text to the scrap, then try the command again.

Too many CASE statements

- *(Script) You used more than 16 script CASE statements in a MATCHBEGIN/MATCHEND procedure.*

Note the error location that accompanies the message, edit the script to correct the problem, then run the script again using the Run Script command.

Too many files

- *You tried to open more files than the IBM Disk Operating System can currently accommodate. Or, you have asked the Editor to load more than ten files during a single editing session.*

To increase the number of files DOS can accommodate, use the DOS FILES command in the CONFIG.SYS file.

In the Editor, leave and then restart the Editor before starting to work on the next document.

Too many script files

- *You tried to run more than four script files at the same time.* Both a .LGN file, run by the script CONNECT command, and a LOADVAR file are counted as active script files. Reduce the number of script files you are running to four or less.

Too many windows

- *You tried to open a window, and already have eight windows open.*

Close one of the existing windows before trying to open a new one.

Too many words

- *You entered too many words in the command field.*

Reduce the number of words in the field.

Transfer successful

- *You carried out the Transfer Protocol Send or Receive command and the transfer was completed successfully.*

No action required.

Type mismatch

- *(Script) You specified an incorrect data type as an argument in a script statement. For example, a string constant or variable where an integer value is required.*

Note the error location that accompanies the message, edit the script to correct the problem, then run the script again using the Run Script command.

U**Unable to run program**

- *You used the Run Program command but the IBM Disk Operating System was unable to run the program because of insufficient memory, or because it could not locate COMMAND.COM.*

If you started Access from a floppy-disk, make sure that COMMAND.COM is present on the disk; if you started Access from a directory on your hard disk, then make sure that COMMAND.COM is present in that directory. For instructions on copying COMMAND.COM, see "Access Disks" at the beginning of this manual.

Updating Phonebook...

- *Access is updating your Phonebook.*

No special action is required.

V**Voice mode request canceled. Enter Y to continue**

- *You pressed the Esc key and Access has canceled the voice mode request.*

Press Y to continue data communications.

Voice mode requested

- *The microcomputer to which you are connected has requested voice mode operation.*

If your modem supports voice communications, press the VOICE key (SHIFT-F4) to acknowledge the request. If you do not want to switch to voice communications, ignore the message.

Waiting for call...

- *You have set Access to answer a call and it is waiting for the phone to ring.*

No action is required. When the phone rings, Access will answer and return to the Session menu.

Waiting for reply to voice mode request

- *You have sent a voice mode request to another computer by pressing the VOICE key, and Access is waiting for the acknowledgement character (+).*

No action required.

Warning! You may still be connected

- *You carried out the Disconnect command but the modem carrier signal indicates you are still connected.*

Confirm that you have set your modem switches properly. If you are using a standalone modem, check that you are using a properly configured RS-232-C cable, as described in Appendix B, "Modems and Hardware."

WEND without WHILE

- *(Script) You used a WEND statement without a previous WHILE statement in a script file.*

Begin the WEND loop with a WHILE statement.

WHILE without WEND

- *(Script) You used a WHILE statement without a subsequent WEND statement in a script file.*

Close the WHILE loop with a WEND statement.

Writing login file...

- *You are using the Install procedure and have entered service login information. Access is saving this information on disk to automate future logins to this service.*

No action is required.

X.PC driver is active on other comm line

- *You tried to make an X.PC connection on a communications line without disconnecting an existing X.PC connection on another line.*

W

X

The X.PC driver supports only one communications line at a time. Disconnect the first X.PC line before trying to make an X.PC connection on a second.

X.PC driver not loaded

- *You tried to make an X.PC connection without loading the driver.*

See Appendix D, "Using X.PC Connections," for more information.

X.PC response

- *You carried out the Connect command on an X.PC channel, and Access displays the response from the X.PC driver.*

No action is required.

Y

You are still connected

- *You carried out the Quit command and pressed N to remain connected to a host. Although you have quit Access, you are still connected.*

No action is required.

You cannot edit the end mark

- *You have attempted to delete or copy when the end mark is selected.*

Make a new selection.

You cannot edit this document

- *You have tried to enter text into a document that you loaded as a "read only" file.*

If you wish to edit the document, use the Transfer Load command to reload the document. This time select the "No" option in the "read only" field of the Transfer Load command.

1978 is the earliest year available

- *(Quotes Historical or Search Company commands) Dow Jones has no quarterly data earlier than 1978.*

Specify a date later than 1978 and try again.

1979 is the earliest year available

- *(Quotes Historical or Search Company commands) Dow Jones has no monthly data earlier than 1979.*

Specify a date later than 1979 and try again.

Appendix A

The Keyboard

The following tables list keys and key combinations you use to perform certain actions. Each key or key combination appears with its keytop(s) and its Microsoft Access keyname. A hyphen (-) between keys means that you hold down the first key while pressing the second.

You can display function, SHIFT-function, or Alt-function key labels and definitions on the screen above the status line by pressing the LABEL key (F2), the SHIFT-LABEL key (SHIFT-F2), or the Alt-LABEL key (Alt-F2). The next key you press removes the display of key labels.

Command Keys

Action	Key to Press	Access Keyname
Move to next menu item	spacebar	spacebar
Move to previous menu item	←	BACKSPACE
Move to next command field	→	TAB
Move to previous command field	←	BACKTAB
Carry out command	↵	ENTER
Cancel command	Esc	Esc
Help	Alt-h	HELP
Select from list of command field responses	↑ ↓ → ← PgUp, PgDn, Home, End	Direction keys: UP, DOWN, RIGHT, LEFT, PgUp, PgDn, Home, End

Command Field Response Editing	Key to Press	Editing Keys
Delete highlighted characters	Del	Del
Delete previous character	←	BACKSPACE
Move to previous word	F7	WORD LEFT
Move to next word	F8	WORD RIGHT
Move to previous character	F9	CHARACTER LEFT
Move to next character	F10	CHARACTER RIGHT

Communications Session Keys

Action	Key to Press	Access Keyname
Move to next window	F1	NEXT WINDOW
Move to next communications line	↑-F1	NEXT COMMLINE
Display function key labels	F2	LABEL
Display shifted function key labels	↑-F2	SHIFT-LABEL
Capture (toggle)	F3	CAPTURE ON/OFF
Print (toggle)	F4	PRINT ON/OFF
Display status lines	F5	STATUS
Record Quickey (toggle)	F7	RECORD ON/OFF
Pause (toggle)	F9	PAUSE ON/OFF
Return to menu	F10	MENU
Resume script processing	↑-F3	SCRIPT RESUME
Transmit break signal	Ctrl-Break	BREAK
Invoke Quickey	Alt-(letter)	Alt
Goto voice communications	↑-F4	VOICE
Terminal reset (clear screen)	↑-F5	RESET
XOFF clear	↑-F6	XOFF-CLEAR
Set X.PC PAD parameters	↑-F7	X.PC PAD
Review session	↑ ↓ → ← PgUp, PgDn, Home, End	Direction keys: UP, DOWN, RIGHT, LEFT, PgUp, PgDn, Home, End
Lock uppercase (toggle)	Caps Lock	CAPS LOCK ON/OFF
Lock numeric keys (toggle)	Num Lock	NUM LOCK ON/OFF
Lock scroll keys (toggle)	Scroll Lock	SCROLL LOCK ON/OFF
Space	spacebar	spacebar
Backspace	←	BACKSPACE
Tab	→	TAB
Rubout or Delete (ASCII value 127)	Ctrl-← or Alt-127	RUBOUT
Carriage-return	↵	ENTER
Linefeed	Ctrl-j	LINEFEED

Review Keys

Action	Key to Press	Access Keyname
Select up	↑	UP
Select down	↓	DOWN
Select left	←	LEFT
Select right	→	RIGHT
Select first character in line	Home	Home
Select last character in line	End	End
Select top of window	Ctrl-Home	TOP WINDOW
Select bottom of window	Ctrl-End	BOTTOM WINDOW
Extend selection (toggle)	F6	EXTEND ON/OFF

Scrolling	Key to Press	Scrolling Key
Scroll up	PgUp	PgUp
Scroll down	PgDn	PgDn
Scroll to start	Ctrl-PgUp	START
Scroll to finish	Ctrl-PgDn	FINISH
Scroll left	Ctrl-←	SCROLL LEFT
Scroll right	Ctrl-→	SCROLL RIGHT
Scroll up one line	Scroll Lock-↑	UP ONE
Scroll down one line	Scroll Lock-↓	DOWN ONE
Scroll left 1/3 of window	Scroll Lock-←	LEFT ONE
Scroll right 1/3 of window	Scroll Lock-→	RIGHT ONE

Remote Terminal Keys

Action	Key to Press
Move to next menu item	spacebar
Move to next field	tab
Carry out command	carriage return
Cancel command	escape
Help	Ctrl-f h
Delete previous character	backspace or rubout
Display list of command field responses	Ctrl-f l
Return to menu	Ctrl-f m
Capture (toggle)	Ctrl-f c
Print (toggle)	Ctrl-f p
Transmit break signal	Ctrl-f b

VT100 Keypad (for VT100 Terminal Emulation)

Action	Key to Press	Access Keyname
Display Alt function key labels	Alt-F2	Alt-LABEL
PF1	Alt-F3	PF1
PF2	Alt-F4	PF2
PF3	Alt-F5	PF3
PF4	Alt-F6	PF4
Up arrow	Alt-F7	UP
Down arrow	Alt-F8	DOWN
Left arrow	Alt-F9	LEFT
Right arrow	Alt-F10	RIGHT

VT100 and VT52 Keypad

For Access to recognize VT100 or VT52 keys, you must set your terminal type to “VT100” or “VT52” in the “terminal” command field of the Modify Settings command.

VT100/VT52 Key	Key to Press
Up	(Scroll-Lock) ↑
Down	(Scroll-Lock) ↓
Left	(Scroll-Lock) ←
Right	(Scroll-Lock) →
PF1	Alt-F7
PF2	Alt-F8
PF3	Alt-F9
PF4	Alt-F10

VT100 and VT52 Keypad (Applications Mode)

To use the IBM keypad for VT100/VT52 Applications mode, you must first press the Num-Lock key.

VT100/VT52 Key	Keypad Key to Press (with Num-Lock depressed)
0	0 Ins
1	1 End
2	2 ↓
3	3 PgDn
4	4 ←
5	5
6	6 →
7	7 Home
8	8 ↑
9	9 PgUp
-	-
,	PrtSc *
.	. Del
Enter	+

Note To use the direction keys while in VT100 Applications mode, with Num-Lock ON and Scroll-Lock ON, use shifted direction keys.

Appendix B

Modems and Hardware

This appendix provides general information about the modems supported by Microsoft Access and about direct connection without a modem. The directions for installation assume that you have already set up your microcomputer according to the manufacturer's instructions.

To enable Access to communicate with other computer systems, you need either a direct connection or a modem.

- For direct connection, you need an RS-232-C cable to connect your microcomputer and the host computer.
- For connection via telephone lines, you need an RS-232-C cable, an automatic-dial modem or a manual-dial modem, and a standard telephone line.

If you have a modem installed inside your microcomputer, you do not need the RS-232-C cable.

Modem Requirements

To connect to a host computer through the telephone lines, you need an automatic-dial ("smart") modem or a manual-dial modem (acoustic coupler).

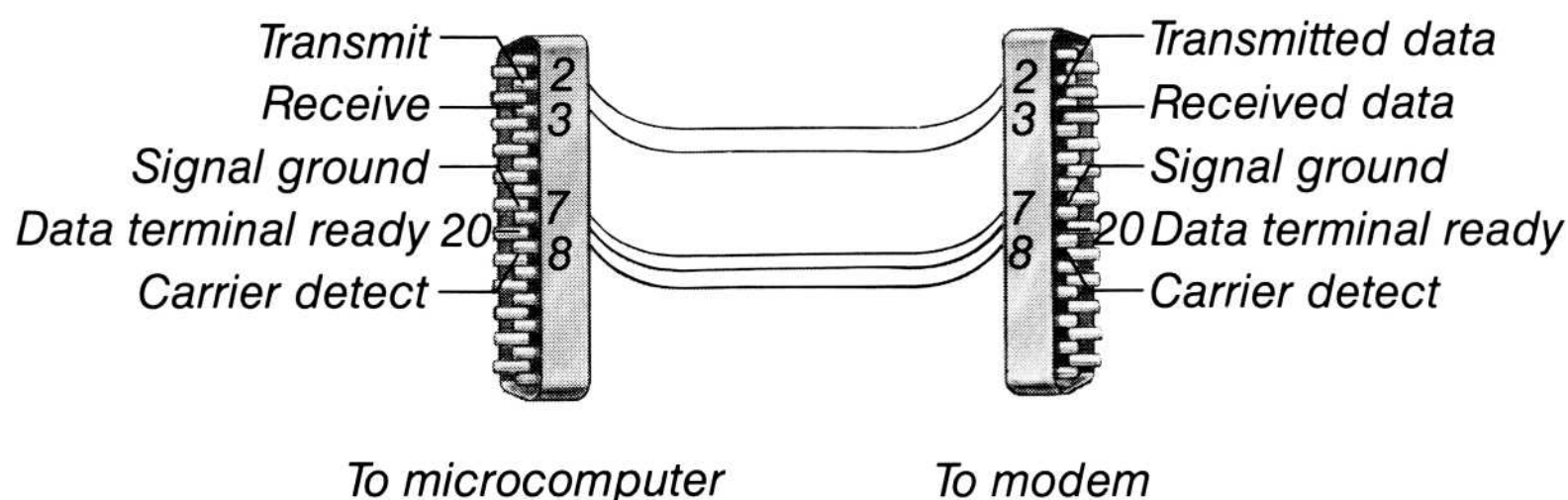
Your telephone line can be either a standard telephone company line, connected directly to outside lines, or a private branch exchange (PBX) line, connected to your internal phone system. PBX systems usually require you to dial a number, such as 9, to access an outside line.

Remember the following two considerations when using the telephone line with your microcomputer:

- Some telephone lines have a "call waiting" feature, which must be turned off because it breaks the connection with the service.

- No one should try to use an extension telephone connected to the same line as the modem. This will cause numerous error conditions.

If you have a standalone modem, you need an RS-232-C cable with 25-pin connectors on each end, and an asynchronous communications adapter for your microcomputer. The cable must have the following minimal configuration:



If your modem installs inside your microcomputer, a cable and asynchronous adapter are not used.

Modem Installation

Successful installation requires that you become familiar with your modem. There are as many differences as similarities between manufacturers, so read the modem documentation thoroughly before you begin. This is especially important when the modem installs inside your computer.

When you install either a communications adapter for use with a standalone modem, or install an internal modem, it is very important that the switches on these adapters or modems are set properly. In general, the two key switches are those pertaining to DTR (Data Terminal Ready) and CD (Carrier Detect). Both should be set to follow the action of these leads. The file README.MDM on the Access Information Services and Utilities disk contains switch settings for the automatic dial modems Access supports.

When you are installing a second communications adapter or internal modem, make sure that one adapter/modem is set to line 1 (COM1) and the other to line 2 (COM2).

One of the most common problems with two communications adapters is the failure to set them properly. Many adapters require that you set two different switches or jumpers in order to select them as line 1 or line 2. Many multi-function boards (for memory expansion, for example) have a communications adapter (also called a serial port) built in. Even if you do not intend to use this adapter, make sure that it is properly set so it does not conflict with another adapter. For example, if you have an adapter set to line 1 (COM1), make sure that the multi-function board adapter is set to line 2 (COM2) or is disabled.

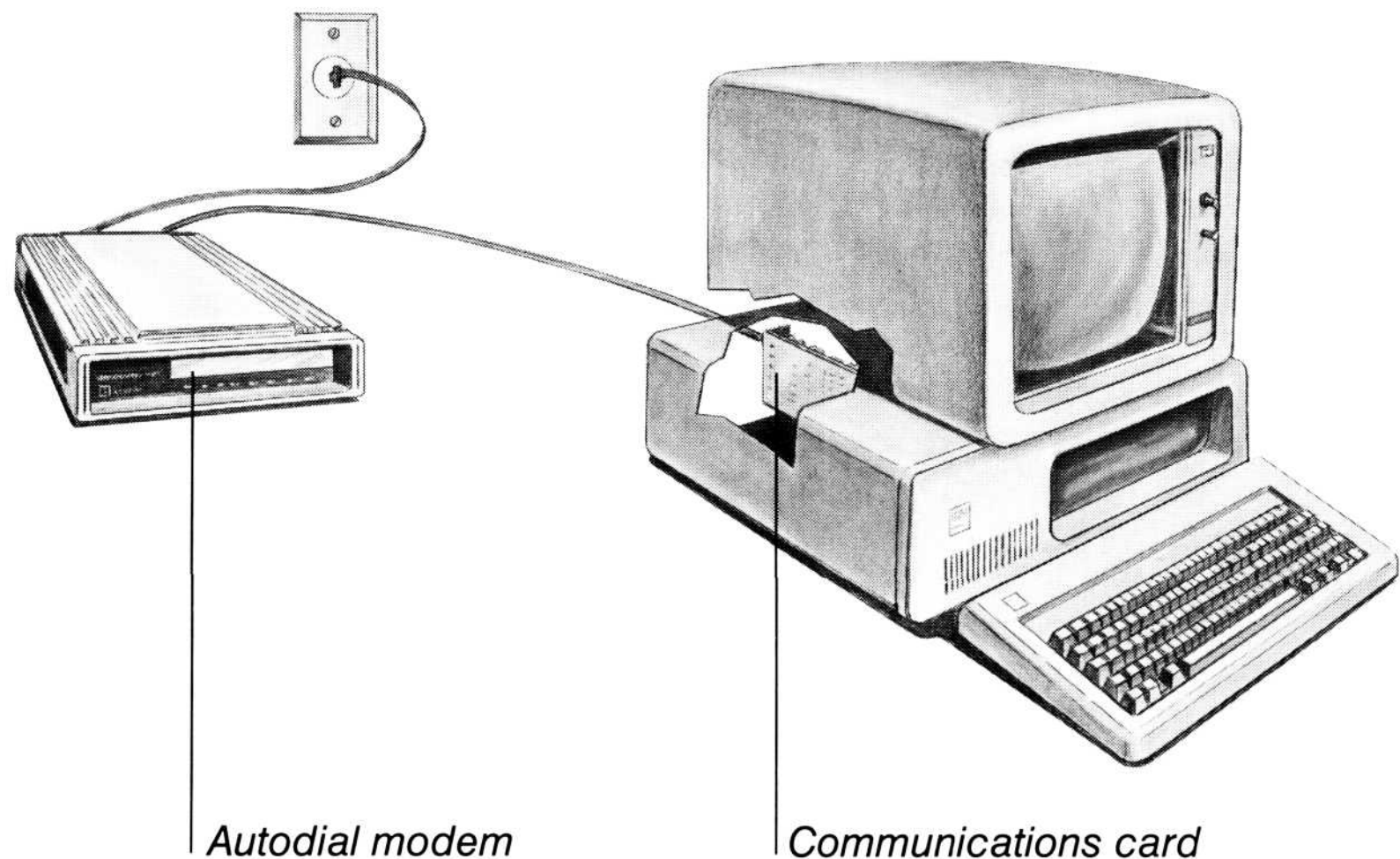
Important Before starting to install a communications adapter or internal modem, turn off your microcomputer and unplug it from the electrical outlet.

Setting Up a Standalone Modem

Setting up a standalone modem

- 1 Install the communications adapter in your microcomputer according to the manufacturer's directions. If you are using two communications adapters, set one for line 1 (COM1) and the other to line 2 (COM2).
- 2 Set the switches on your modem. The file README.MDM on the Access Information Services and Utilities disk contains switch setting information, as does your hardware manual. In general, you should enable your modem to follow DTR and Carrier Detect, allow the modem to send and understand result codes, and permit it to answer incoming calls. For example, set the Hayes Smartmodem 1200 so that switches 3 and 8 are in the "DOWN" position, and the rest are in the "UP" position.
- 3 Connect the modem or acoustic coupler to the communications adapter using the RS-232-C cable, taking care to secure both ends of the cable.
- 4 Connect the modem or acoustic coupler to the phone jack with a standard telephone cord.
- 5 Plug the modem or acoustic coupler power cable into an electrical outlet.
- 6 Plug the microcomputer into an electrical outlet.

The following shows a sample communications system setup with a standalone modem.



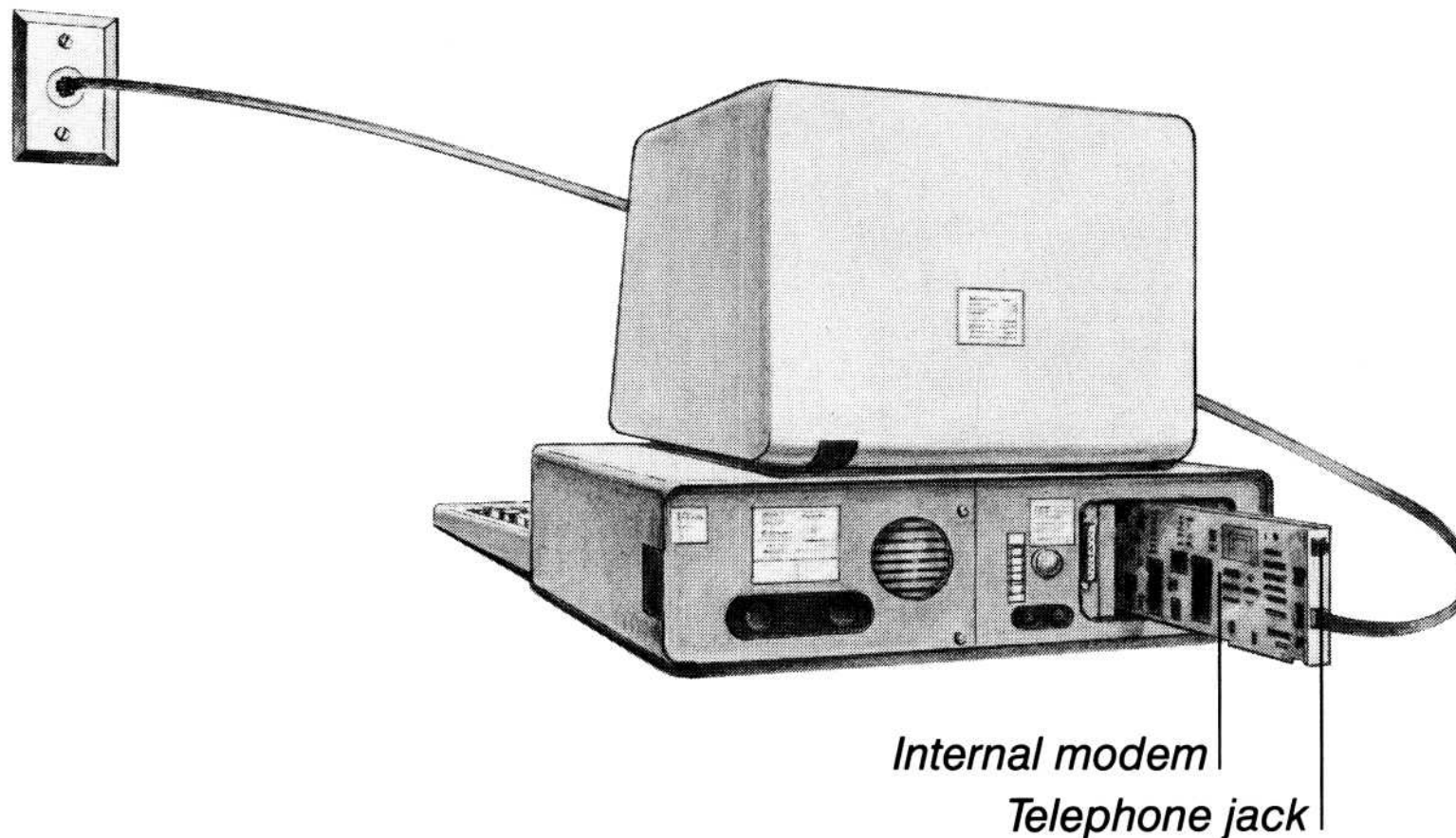
You can also set up a communications system using an internal modem.

Setting up an internal modem

Setting Up an Internal Modem

- 1 Set the switches on your modem. The file README.MDM on the Access Information Services and Utilities disk contains switch setting information, as does your hardware manual. Although there are generally fewer switches on internal modems than on external ones, the principles outlined in the previous section still apply. In the case of the Hayes 1200B, for example, this means ensuring that switch 3 is set to the "ON" position, so that the modem can follow Carrier Detect.
- 2 Install the modem in the microcomputer according to the manufacturer's instructions.
- 3 Connect the modem to the phone jack with a standard telephone cord.
- 4 Plug the microcomputer into an electrical outlet.

The following shows a sample communications setup with an internal modem.



Setting Modem Option Switches

After you have installed your modem and any other hardware, set your modem option switches to the appropriate settings.

You can connect your phone to your modem's telephone line. This allows you to use your telephone line as usual when you are not connected to another computer, and to use Access' ability to switch between voice and data communications. It also makes communications problems easier to diagnose.

Some modems have an additional modular jack on the back into which you can plug your phone set. If yours does not, your local telephone dealer can provide a modular "T" adapter which lets you connect your modem and phone into one telephone line simultaneously.

If you are using a modem that is neither listed in README.MDM nor compatible with one of the modems listed, set up your modem to meet the following requirements:

- 1 Set the modem so that it sets the Carrier Detect signal (RS-232-C pin 8) to ON only when the modem receives a carrier signal. Access uses the Carrier Detect signal to determine that a connection has been made.
- 2 Set the modem so that it hangs up when the Data Terminal Ready signal (RS-232-C pin 20) is OFF. Access "drops DTR" (turns the signal off) to instruct the modem to hang it up.

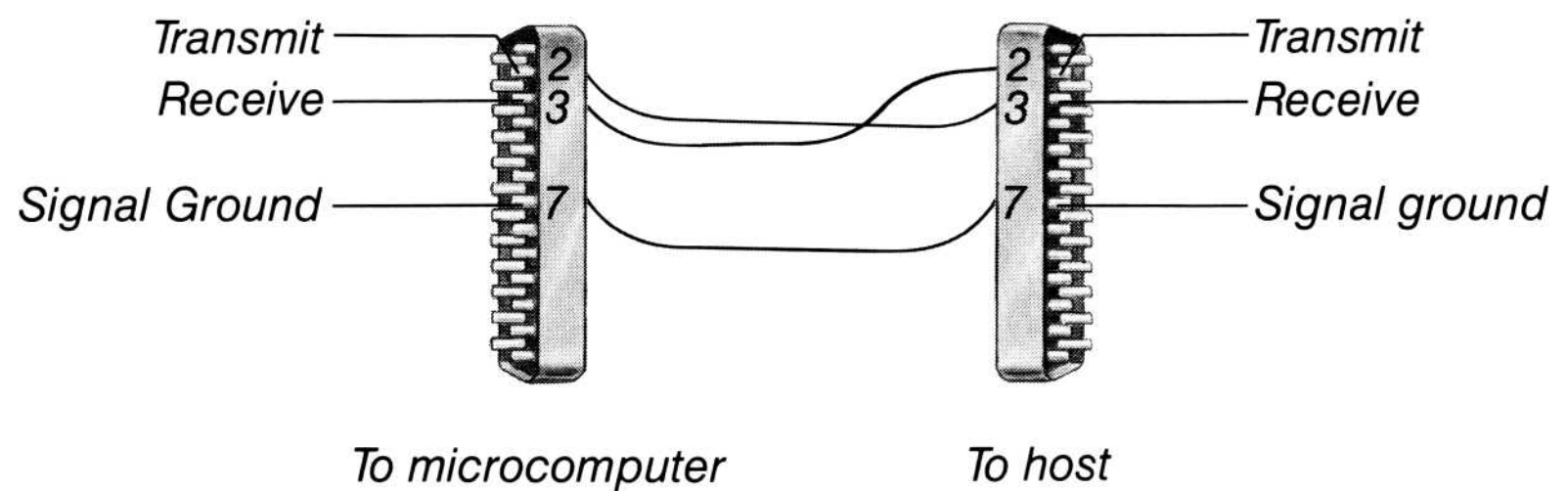
**Connecting a phone
to your modem**

**Setting up a non-
compatible modem**

- 3 Choose "Other" in the "modem name" command field in the Options command.
- 4 Fill in the remaining modem fields in the Options command as described in the Options command in Chapter 20, "Session Menu and Phonebook Commands," and in your modem documentation.

Direct Connection

A direct cable connection between your microcomputer and the host computer is the most dependable because it does not require the additional equipment necessary for telephone communications. For direct connection, you need an RS-232-C cable and an asynchronous adapter. The cable must have the appropriate 25-pin connector to attach to the adapter, and have the following minimal configuration:

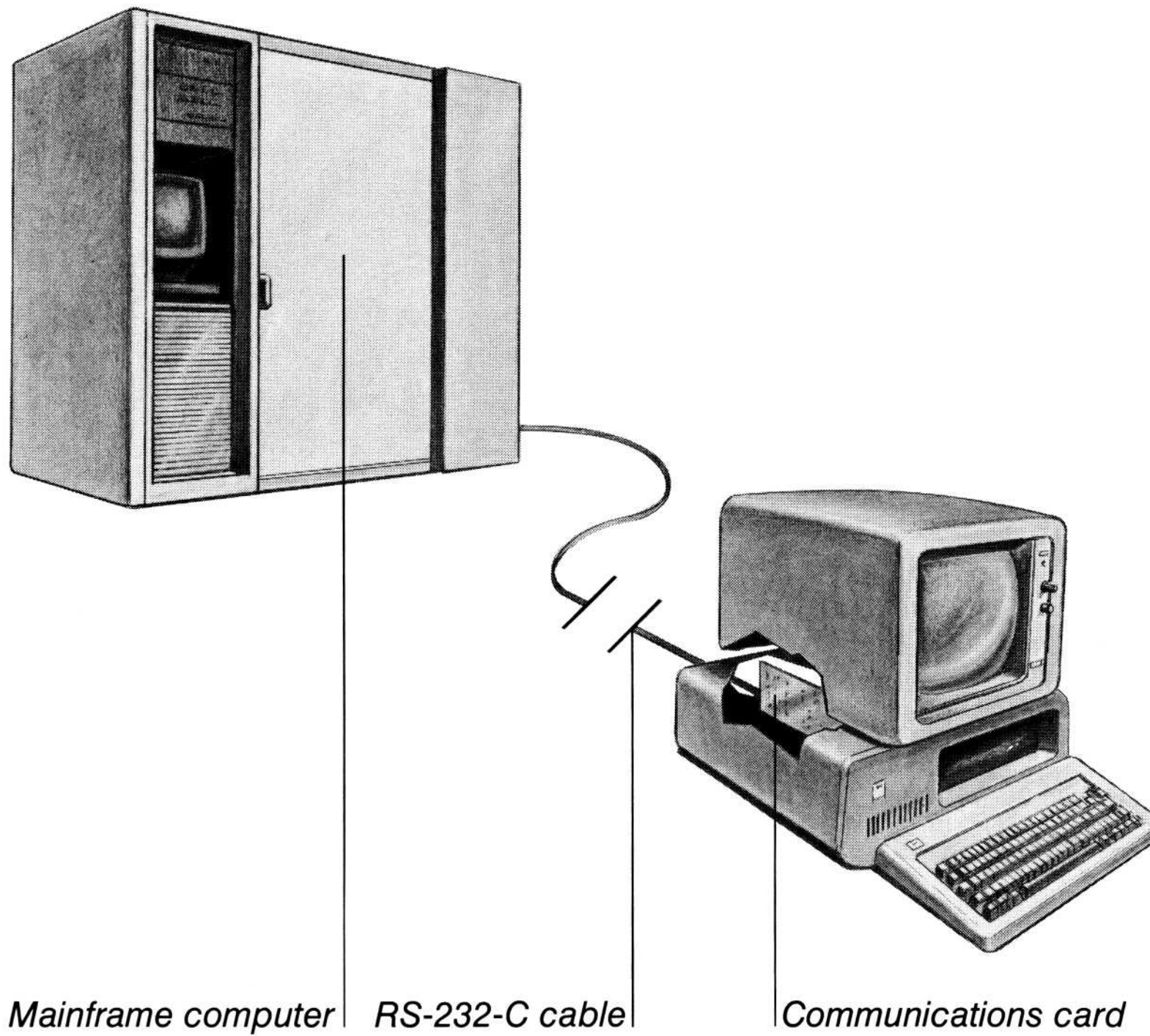


Note The transmit and receive wires between the two computers must be crossed in order for communications to succeed.

Setting up a direct connection

- 1 Install the asynchronous communications adapter in your microcomputer and connect the RS-232-C cable to the two machines.
- 2 Plug the microcomputer into an electrical outlet.

The following shows a sample communications setup for direct connection:



Appendix C

Encrypting Files for Security

Microsoft Access includes a program you can use to encrypt confidential information, such as stock portfolios, resumes, or business reports, so that you can store them on disk or send them over the telephone lines without losing your privacy. This program, called CIPHER, takes a file and “encrypts” the content so that it is unreadable as normal text. Once your IBM Disk Operating System (DOS) is running on your computer, you can start the CIPHER program.

To encrypt a file:

Encrypting a file

- 1 Type the CIPHER command line at your DOS prompt:

```
A>cipher password<diskfile.in>diskfile.out
```

For example, to encrypt a confidential salary survey that is stored as a file called SALARIES.DAT, and store the result in a file called SALARIES.COD, you would type:

```
A>cipher mystery<salaries.dat>salaries.cod
```

Note Spaces are significant between the items on the command line. Put spaces between the words, but not after the operator symbols < and >; join the symbol and the word.

- 2 Press the ENTER key to carry out the encryption.

If CIPHER cannot read your command line entry, it tells you so now.

CIPHER takes the contents of SALARIES.DAT because it follows the “read-in” operator (<). It then encrypts the file based on some password, and sends the result to the destination file that follows the “write-out” operator (>).

Decoding an encrypted file

To decode the encrypted file so you can read it:

- 1 Type in this command line:

A>cipher mystery<salaries.cod

- 2 Press the ENTER key.

The original text that was encrypted appears on your screen.

Recreating the file in its original form

To decode the encrypted file and recreate it as SALARIES.DAT:

- 1 Type in this command line:

A>cipher mystery<salaries.cod>salaries.dat

- 2 Press the ENTER key.

Appendix D

Using X.PC Connections

The X.PC protocol is an asynchronous communications protocol developed by TYMNET, Inc., a leading supplier of value-added networks. X.PC is based upon the international protocol standard X.25. Microsoft Access fully supports all the features of the X.PC protocol. You can use X.PC with any of the modems Access supports.

X.PC has two major advantages:

- Error detection and correction capabilities ensure accurate and reliable data transmission.
- Separate transmission channels let you communicate with up to 15 host computers simultaneously.

X.PC is a session-level protocol. Unlike XMODEM, which is a file transfer protocol, X.PC provides protection against data transmission errors during your entire session from login through logoff.

This appendix explains how to communicate with host computers and other microcomputers using the X.PC protocol with Access.

Using X.PC with Access

Access supports the multiple-channel facility of X.PC in much the same way it supports multiple communications lines, described in Chapter 14, "Communicating with Several Computers." Wherever you would normally specify a communications line in Access, you can specify an X.PC channel in the form *commline.channel*. Channels are numbered 1 through 15. For example, *1.5* refers to channel 5 on communications line 1.

You can use X.PC on only one communications line at a time. For example, if you use communications line 1 to make an X.PC connection, you cannot make an X.PC connection on communications line 2 until you disconnect communications line 1.

The XPC.COM Program

To use X.PC within Access, you must first run a program called XPC.COM on your Access Information Services and Utilities disk. XPC.COM is a DOS “run-stay-resident” program. This means that you need to run XPC.COM only once each time you start DOS; you do not need to run XPC.COM each time you start Access. If you will be using X.PC connections often, you might want to include XPC.COM in your DOS AUTOEXEC.BAT file, so it will be run automatically for you each time you start DOS.

XPC.COM requires approximately 40K of memory. If you wish to use X.PC you should have at least this much additional memory, over and above the 256K required for the Access program itself.

Making an X.PC Connection Using Tymnet

To initiate an X.PC connection on the Tymnet network, you must first log in to a Tymnet X.PC Network Server. The Network Server, accessible from any dial-in port on the network, supports both the error-free transmission and multi-channel services between the network and your PC. Once you are connected to the Network Server, you can establish up to 15 simultaneous host connections.

Logging in to Tymnet

To log in to the Tymnet Network Server:

- ❶ Choose the Connect command.
- ❷ Type a name of your choice in the “name” field. For example, *TYMXPC*
- ❸ Type your local Tymnet telephone number followed by an “at” sign (@) in the “phone number” field. For example, *555-1234@*

When the “@” character is present, Access automatically invokes the X.PC protocol when signaled by the Network Server.

- ❹ Press the ENTER key to carry out the Connect command.

Tymnet will display the prompt “please enter your terminal id.”

Note Tymnet sends the terminal id prompt at 300 baud, regardless of the speed at which you connected. If you connected at a speed other than 300 baud, you will not see this prompt. Instead, just wait approximately 3 or 4 seconds, then follow the next step.

- 5 Type the letter *a*

Tymnet displays the prompt “please log in:”

- 6 Type your Tymnet X.PC user name and password.

Tymnet responds with a message naming the X.PC Network Server you have connected to. After a few seconds, the Access Session menu reappears, indicating that Access is ready to connect to a host using an X.PC channel. The status line will show that channel 1 is the active channel. A flashing asterisk (*) will appear after the word *OFFLINE*, indicating that, although the channel is offline, you have a telephone connection to the Network Server.

To connect to a host using an X.PC channel:

- 1 Choose the Connect command.
- 2 Type a name of your choice in the “name” field. For example, *DOWXPC*
- 3 Type an “at” sign (@), followed by the Tymnet-assigned host name and password, followed by a vertical bar sign (|) specifying a carriage return, in the “phone number” field. For example, *@HOST;PASSWORD|*
- 4 Specify the channel you want to use, or accept the proposed response in the “comm line” field.
- 5 Press the ENTER key to carry out the Connect command.

Access displays the message “X.PC response: Call Request...” indicating that Access is attempting to establish a channel connection to the host.

- 6 Upon connection to the host, log in as usual.

To open a channel to another host, activate a new channel using either the Goto command or the Window Split command. In the “comm line” field, specify the new channel using the format *commline.channel*.

You can combine the two procedures — the Network Server connection and the host channel connection — by typing both the telephone number and the hostname/password in the “phone number” field of the Connect command, separated by the “@” character (for example, *555-1234@ Hostname; password|*). Upon connection to Tymnet, log in as described above. When Access receives a signal from the Network Server, Access automatically connects to the specified host.

You can store the responses in the Connect “name” and “phone number” command fields in your Phonebook, as you would for any other host.

Connecting using an X.PC channel

If you already have an X.PC connection, and enter a telephone number and hostname/password combination, Access ignores the telephone number and merely makes the host connection on the active channel.

Disconnecting

Disconnecting

To disconnect from a host, log off the host as usual. Within a few seconds Access displays *OFFLINE* on the status line. This is the preferred way to disconnect. You can also use the Disconnect command, specifying the channel to disconnect.

Disconnecting a channel does not disconnect you from the X.PC Network Server. Access indicates that the Network Server is still active by displaying a flashing asterisk (*) after the word *OFFLINE* on the status line. To disconnect from the Network Server and hang up the telephone line, you must explicitly disconnect the communications line by choosing the Disconnect command and specifying the communications line number only.

If you disconnect the communications line, all channels are automatically disconnected.

When you activate a channel, Access allocates a portion of memory to support the use of that channel. This memory remains allocated even after you disconnect so you can review your session. To clear this memory, type */c* following the communications line and channel specification in the “comm line” field of the Disconnect command. For example, *1.5/c* would disconnect channel 5 on communications line 1 and clear its memory.

Using X.PC between Two Microcomputers

To establish an X.PC connection between two microcomputers, first set one of the microcomputers to answer a call. You can specify that the answering PC should begin an X.PC protocol session upon answering the call. Use any of the following methods:

Setting up the answering computer

- In the “name” field of the Answer command, type the keyword */XPC* as a suffix to the Phonebook entry name. For example, *HOST/XPC*. If you type */XPC* alone, without a Phonebook entry name, Access answers the call using the current communications settings.
- In the “name” field of the Answer command, type a Phonebook entry name that has a telephone number containing the “@” character. For example, *NONE@*
- If you set the “control” field of the Answer command to Remote and enter a password in the “password” field of the Options command, the caller can request the X.PC protocol by

terminating the password with */XPC*. This method gives the caller the choice of starting an X.PC session or not; with the other two methods, the X.PC protocol will start automatically as soon as the caller enters the correct password, or upon completing the call if no password is required.

When Access answers the call, and receives a valid password if one is required, it sends the message “Starting X.PC protocol” to the calling computer. Access then sends eight escape characters to the calling computer, indicating that it is now communicating using the X.PC protocol. Access then expects to receive a “call request” from the calling computer to establish a channel connection.

After one computer has been set to answer, the second computer can call the first and establish an X.PC connection. To connect to a computer which has been set to use the X.PC protocol:

Establishing the X.PC connection

- 1 Choose the Connect command.
- 2 In the “phone number” field, type the telephone number, followed by *@access*; for example, *123-4567@access*;
Do not type any characters after the semicolon. This area is reserved for use in future versions of Access.
- 3 Press the ENTER key to carry out the command.
- 4 When the answering computer answers the call, enter the password, if necessary.

The answering computer will send the message “Starting X.PC protocol.” Access then establishes a channel connection automatically.

Setting X.PC PAD Parameters

The acronym “PAD” stands for Packet Assembler/Disassembler. In packet-switched networks such as Tymnet, the PAD software provides an interface between your microcomputer and the network. Usually this software runs on a minicomputer at the local network telephone number location.

The PAD can answer calls and request login information, echo the characters you type, assemble packets of characters for transmission through the network, receive packets of characters from the network and transmit them to your microcomputer, and provide XON/XOFF flow control.

Some PADs also support simple editing of the characters you type. Instead of sending each character as you type it, the PAD stores them in a buffer, which makes it possible for you to backspace to correct a typing error. When you press the ENTER key, the PAD transmits the contents of the buffer to the host. This local editing is less of a burden for the host, resulting in faster response time.

The XPC.COM program has many of these same PAD functions. In effect, the XPC.COM program accomplishes these functions at your microcomputer.

When you log in to a host, the host (through the network) usually informs the PAD of which functions it should perform. For example, as you log in, the host instructs the PAD to echo back the characters of your user name/id. However, when the host requests your password, it instructs the PAD to stop echoing, so the characters of your password do not appear on your screen.

Usually you need not be concerned about the PAD operation because the host controls the PAD. However, if necessary, you can control PAD functions by setting PAD parameters to appropriate values. Each parameter controls one aspect of PAD operation, such as echoing, the kind of editing allowed, or whether the PAD transmits each character as it is typed or waits for an entire line.

Note Each channel has its own set of PAD functions.

Setting PAD parameters

To set PAD parameter values:

- Press the X.PC PAD key (SHIFT-F7).

Access displays the X.PC PAD command fields.

- 1 In the “parameter number” field, type a PAD parameter number or press a direction key to select from a list of parameter numbers.

Parameter numbers and their descriptions are stored in the file XPCPAD.DES on the Access Information Services and Utilities disk.

- 2 Type an appropriate value in the “value” field.
- 3 Press the ENTER key to carry out the command.
- 4 You can continue to type parameter values. To resume your communications session, press Esc.

X.PC Script Commands

XPCACTIVE System Variable

XPCACTIVE system variable

state = XPCACTIVE

Use this command to determine if the X.PC protocol is active.

XPCACTIVE is set to True (– 1) when the X.PC protocol has been established. The XPCACTIVE variable is useful in .LGN files to determine whether it is necessary to establish an X.PC connection or merely open a new channel.

Example

```
IF XPCACTIVE THEN GOTO OPENCHAN
MATCH "Please log in: "
SEND "XPC"
XPCWAIT
```

OPENCHAN: CONNECT "HOST1"

XPCCONNECT System Variable

XPCCONNECT system variable

state = XPCCONNECT

Use this command to determine if an XPC connection is in progress.

XPCCONNECT is set to True (– 1) if the telephone number of the current connection contains the “@” character. This command is useful in .LGN files where different host interactions are necessary for establishing an X.PC connection.

Example

```
MATCH "Please log in: "
IF XPCCONNECT THEN SEND "XPC" ELSE SEND "HOST1"
```

XPCGETPAD function

XPCGETPAD Function

value = XPCGETPAD(*parameter_number*)

Use this command to determine the X.PC PAD settings of the current channel.

Parameter_number is an integer expression specifying the desired PAD parameter. If an invalid parameter number is specified, the XPCGETPAD function returns -1 .

Example

```
FOR I=1 to 10
TYPE I," ",XPCGETPAD(I)
NEXT
```

XPCSETPAD function

XPCSETPAD Function

result = XPCSETPAD(*parameter_number,value*)

Use this command to set an X.PC PAD parameter of the current channel.

Parameter_number is an integer expression specifying the desired PAD parameter.

Value is an integer expression specifying the new PAD value.

XPCSETPAD returns True (-1) if the parameter number and value are valid. Otherwise, it returns False (0).

Use XPCSETPAD only after a channel connection has been made. If the X.PC protocol is not active, XPCSETPAD always returns False (0).

Example

```
RESULT = XPCSETPAD(1,1)    'Set PAD parameter 1 to 1
```

XPCWAIT Statement

XPCWAIT statement

XPCWAIT [*seconds*]

Use this command to wait for the X.PC protocol connection to be established.

XPCWAIT is useful in .LGN files to ensure that the X.PC protocol is active before proceeding with script processing.

Seconds is an integer expression specifying the number of seconds to wait for the X.PC protocol. If *seconds* is not specified, Access waits 30 seconds.

Use XPCWAIT whenever you specify a combined telephone number and hostname pair in a Connect command. Because Access automatically opens a channel and connects to the host when the protocol is established, the XPCWAIT statement provides a way to synchronize the script file with this automatic connection.

Example

```
MATCH "Please log in: "  
SEND "xpc"  
XPCWAIT 20  
IF NOT XPCACTIVE THEN GOTO XPCFAILED  
MATCH "User Id: "  
SEND "company xyr"
```


Appendix E

Updating Custom Menus

Custom Menus are similar to the scripts you create: they are files separate from the Access program itself. Occasionally, services may add new features that require changes to existing Custom Menus, or Microsoft may create new Custom Menus for other services. You can use Access both to find out what updates are available and to obtain the new Custom Menu files.

Important Custom Menu updates are not the same as Access product updates. Be sure to return the product registration card included in the Access package so Microsoft can notify you of Access product updates as they become available. Custom Menu updates will be included in future versions of Access.

Finding Out about Updates

You can find out what Custom Menu updates are available through the CompuServe Executive Information Service. (To use CompuServe for this purpose, you must subscribe to CompuServe.)

The following procedure assumes you have a Phonebook entry and a login file for CompuServe. If you need to connect or log in manually, see Chapter 2, “Connecting to Other Computers,” for details.

To find out about updates:

- ❶ Choose the Connect command from the Session menu.
- ❷ Type *compusv* in the “to name” field, or use the direction keys to select COMPUSV from the Phonebook.
- ❸ Press the ENTER key.

Access will connect you to CompuServe, and automatically log you in.

To find out about updates

- 4 Choose the Bypass command from the CompuServe main Custom Menu.
- 5 Type *go mic* at the CompuServe prompt (an exclamation point).

CompuServe displays information about updates, a menu listing the updates that are available, and instructions on how to receive them.

If you would prefer not to receive any updates now, press the MENU key (F10) to return to the CompuServe main Custom Menu. You can continue your CompuServe session, or log off and disconnect.

Receiving Updates

A Custom Menu update usually consists of three files: a script file (extension .SCR), a menu file (extension .MEN), and a documentation file (extension .DOC). The script file and the menu file together function as the Custom Menu. The documentation file is a text file that contains information about the Custom Menu that is not already present in your Access manual.

To receive a Custom Menu update, you use the Transfer Protocol Receive command to transfer the Custom Menu files from CompuServe to either your Information Services and Utilities disk or Mail program disk, depending on the update. (This process is sometimes called “downloading.”)

Note If you have not already made backup copies of your Information Services and Utilities disk and Mail program disk, we recommend you do so before downloading Custom Menu files. While the Transfer Protocol Receive command uses XMODEM error-checking protocol to help ensure safe and accurate data transmission, there is always some risk that a transmission might be interrupted while Access is writing a file to disk, possibly compromising the integrity of the existing files. Should this happen, you will still have an undamaged version of the files on the backup disk.

To receive a Custom Menu update:

To receive updates

- 1 Choose the update you want from the menu displayed by CompuServe.

CompuServe will prompt you with the name of the first Custom Menu file for the update you chose. Before you can receive the file, you need to discontinue the CompuServe Custom Menu script, as follows:

- 2 Press the MENU key (F10) to display the CompuServe main Custom Menu.

- 3 Press the Esc key.

Access will display the message "Enter Y to terminate script run, or N to continue."

- 4 Press Y to discontinue the CompuServe Custom Menu script. Access displays the Session menu and retains your connection to CompuServe.

If you are downloading an update to Mail, and have two floppy-disk drives, remove the Information Services and Utilities disk from drive B and insert the Mail program disk now. If you have a hard disk, no action is necessary.

- 5 Choose the Transfer Protocol Receive command from the Session menu.

- 6 Type a full pathname in the "filename" field for the Custom Menu filename presented by CompuServe.

If CompuServe presents the filename COMPUSV.SCR, for example, the full pathname for two floppy-disk drives would be *b:compusv.scr*. For a hard disk, the full pathname would be *c:\MSTOOLS\compusv.scr*.

- 7 Press the ENTER key to carry out the Transfer Protocol Receive command.

CompuServe sends the update file and Access writes it to disk. When CompuServe is finished sending the file, it prompts you to receive the next file.

- 8 Wait for the Session menu to reappear. Then repeat steps 5, 6, and 7 for each update filename presented by CompuServe.

When you are finished receiving updates, you can either restart the CompuServe Custom Menu, or log off and disconnect from CompuServe.

To restart the CompuServe Custom Menu

To restart the CompuServe Custom Menu:

- ❶ Choose the Run Script command from the Session menu.
- ❷ Type *compusv* in the “filename” field.
- ❸ Press the ENTER key.

Access runs the CompuServe Custom Menu script and displays the CompuServe main Custom Menu.

To log off and disconnect from CompuServe

If you choose not to restart the CompuServe Custom Menu, you can log off and disconnect from CompuServe:

- ❶ Type *bye* at the CompuServe prompt (an exclamation point).
- ❷ Choose the Disconnect command from the Session menu.

Glossary

Acoustic coupler A device you use with a standard telephone receiver to serve the same purpose as a modem. Like a modem, an acoustic coupler changes digital signals into sound waves and sound waves into digital signals. Unlike a modem, an acoustic coupler receives sound signals through a standard telephone receiver, rather than electrical signals over cables. An acoustic coupler is more vulnerable to noise and static than a modem, and more suitable for low-speed transmissions. *Compare with* Modem.

Active The item on which you are currently working. The active item is highlighted. For example, the highlighted command in a menu is the active command; the window whose window number is highlighted is the active window.

Active communications line The communications line through which you are currently communicating with another computer. Access displays the communications line number on the status line (for example, L1).

ASCII American Standard Code for Information Interchange. A standard code for microcomputers, assigning uppercase and lowercase letters, numbers, punctuation marks and other symbols, and control codes, to seven-bit combinations. ASCII has 96 displayable characters and 32 nondisplayable (control) characters.

Baud rate The data transmission speed, measured in the number of bits that can pass through a communications line in a second.

Bit A BInary digiT — 1 or 0. This is the smallest unit of information a computer can use.

Break signal A signal used to get the attention of a host computer or to interrupt program execution.

Buffer An area in a computer's memory used to temporarily store incoming and outgoing data.

Capture To save information received in a communications session in a file on disk.

A

B

C

Carrier An electrical signal that can be modulated by tones from a modem. The modem looks for this signal before transmitting data.

Character Any number, letter, punctuation mark, symbol, or special mark (e.g., @, *, %, \$) that you can type as text.

Choose To pick a command, subcommand, or option in a command field. *Choose* is always used in relation to actions you take in the command area.

Columnar text file An ASCII text file organized into columns. You can use the Export utility to convert a columnar text file to the correct file format for spreadsheet or business graphics applications, such as Microsoft Multiplan, Microsoft Chart, VisiCalc, or Lotus 1-2-3.

Command An instruction to Access to perform an action. You choose a command by pressing the spacebar to highlight your choice and then pressing the ENTER key. You can also choose a command by pressing the first letter of the command. A command can have one or more command fields, where you supply details on how Access should carry out the command. *See also* Command field.

Command field The place in a command menu, preceded by a field name and a colon, where you specify further information about how Access should carry out a command. When first displayed, a command field may already contain a response, which you can choose (if it's an option), replace, or edit according to your needs.

Command menu The list of command names you can choose from, displayed on the screen in the top two lines of the command area. *See also* Session menu.

Communications adapter A printed circuit board installed in your computer and connected to your modem with an RS-232-C cable. The adapter converts the parallel stream of bits from the computer into a serial stream for transmission to the modem, inserts parity bits, and adds start and stop bits. It also reverses these procedures on data coming from the modem to the computer.

Control character Any one of the 32 nondisplayable ASCII characters used to control character display. Examples are the carriage return and linefeed characters.

Custom Menu A set of standardized commands designed to simplify communications with an information or mail service. Access translates Custom Menu commands into the more varied and

complex commands required by each service, then translates the service's responses into Custom Menu choices.

Even parity A form of parity in which the eighth bit assigned to each seven-bit character varies in order to make the sum of the character bits even. If the sum of the character bits is even, the parity bit is 0. If the sum of the character bits is odd, the parity bit is 1. *Compare with* Odd parity. *See also* Parity.

Extend To lengthen the highlight that indicates text selection, using the EXTEND key (F6) and the direction keys.

Extension A suffix to a filename up to three characters long, separated from the filename by a period. Many programs automatically assign a particular extension to files they create. For example, in Access, a script you create using the Learn command automatically has the extension .SCR. You can also use your own extensions to distinguish different kinds of files. For example, you might give all your files containing stock information the extension .STK.

Flow control The pacing of data transmission between sender and receiver by using XON/XOFF characters. Different pieces of data transmission hardware operate at different speeds. Sometimes these differences are so significant that the buffers that temporarily store data waiting for processing can overflow. Flow control helps prevent buffer overflow.

Format The way data is arranged in a file. Many applications programs use different formats to store data. A file must be in the format required by an application in order for that application to be able to read the file. You can use the Export utility to convert a columnar text file to the correct file format for a variety of application programs.

Highlight A bright rectangle on the screen used to indicate command choices, active command fields, response choices, active window numbers, and text selections.

Host computer In Access documentation, the microcomputer or mainframe computer with which you are connected. Conventionally, "host" refers only to a mainframe computer.

Information service Any computer-based service that maintains information in database form and makes the information accessible to its subscribers.

Intelligent terminal A terminal that recognizes a specific set of control sequences, such as ANSI-VT100 or VT52 control sequences.

E

F

H

I

L

Local operation A state in which Access is not communicating with another computer but simply displays characters you type on the screen.

M

Menu A list of alternatives, either commands in a command menu or response options in a command field. You can choose a menu item by pressing the spacebar to highlight your choice and then pressing the TAB or ENTER key, whichever is appropriate. You can also choose a menu item by typing the first letter of the command. *See also* Command menu; Custom Menu; Session menu.

Message line The next to the last line on the screen, where Access displays messages.

Modem MOdulator/DEModulator. A device that changes digital signals into voice-frequency signals for transmission over a telephone line, and changes telephone signals back into digital signals for computer processing. *Compare with* Acoustic coupler.

N

Nondisplayable characters Also called control characters. Characters that give instructions to your computer but are not part of the text of your message. For example, a carriage return.

O

Odd parity A form of parity in which the eighth bit assigned to each seven-bit character varies in order to make the sum of the character bits odd. If the sum of the character bits is odd, the parity bit is 0. If the sum of the character bits is even, the parity bit is 1. *Compare with* Even parity. *See also* Parity.

Operating system The software that tells your computer how to perform its fundamental system functions, such as running programs or keeping track of files on a disk. The operating system is the interface between your computer and the various programs you use.

P

Pacing A method of regulating data transmission for a receiving computer that processes data one line at a time. An end-of-line character signals that a block of characters has been sent; then the sending computer waits for a prompt signal from the receiver before it sends the next block.

Parity A method of checking for errors in data transmission. The sending computer sets the value of the parity bit to “describe” the accompanying character. The receiving computer compares the character it receives with the value of the parity bit. If the value of the parity bit is not what the receiving computer expects for that character, the transmission was faulty and the receiving computer can ask the sender to send the character again. *See also* Even parity; Odd parity.

Phonebook A collection of entries in which each entry contains a host computer name, phone number, and communications settings you supplied when you first set up a connection with that host. You can choose an entry from the Phonebook when you use the Connect command. The Phonebook command from the Session menu displays the Phonebook entries, as well as a menu of commands you can use to add, delete, copy, or change entries.

Proposed response A response Access supplies in a command field. A proposed response is usually based on your most recent use of the command or the current status of the program. You may replace a proposed response with your own response. *See also* Response.

Protocol A convention for checking for errors in data transmission.

Quickey A single key which is assigned a string of characters. When you press the Alt key and the Quickey, it sends the associated string of characters as if you had typed them.

Remote operation A state in which the computer running Access is controlled by another computer.

Response Information in a command field. You can type this response or choose from response options. Access usually supplies a proposed response, which you can either replace or accept. *See also* Proposed response.

Review A state that results when you press a direction key during communications so you can look at text that has scrolled out of the window. While you are in review, Access halts correspondence temporarily, and stores incoming data in a buffer. You resume correspondence by pressing the PAUSE ON/OFF key (F9).

RS-232-C Recommended Standard-232-C. A standard set by the Electronics Industry Association for the interface between terminal equipment and communications equipment. It assigns specific signals to each component of the connecting cable.

Scrap A temporary storage area that holds the last piece of text or Phonebook entry that you deleted or copied. The contents of the scrap appear between braces ({}) in the status line. To retrieve the contents of the scrap, select where you want the contents inserted, then choose the Insert command or press the Ins key.

Script A file of special commands that Access follows to carry out a procedure. You can run a script by choosing the Run command from the Session menu. Access creates a script when you use the Learn command, when you instruct it to learn a login

Q

R

S

sequence through the Connect command, or when you write a script program using the Editor and the script command language. Login script filenames have the extension .LGN; other script filenames have the extension .SCR.

Script command A special command that Access recognizes and uses to process script files. *See also* Script.

Scrolling The upward flow of information on your screen to accommodate new lines of data.

Select To highlight a character or group of characters to be affected by the next command.

Session menu The main Access command menu. You use commands from the Session menu to conduct your communications sessions.

Status line The bottom line of the screen, where Access displays the current status of a communications session.

T

Terminal emulation The ability to use your microcomputer as a terminal of a host computer. A terminal recognizes and responds to control sequences that affect screen display and other capabilities supported by the host computer. *See also* Intelligent terminal; TTY.

Ticker symbol A unique series of letters that identifies each stock, bond, or other security listed on the national exchanges. For example, *alk* is the ticker symbol for Alaska Airlines.

Toggle A key that performs an action when you press it once, then reverses the action when you press it again. For example, pressing the PRINT ON/OFF key (F4) once starts printing; pressing it again stops printing.

TTY TeleTYpe. A type of dumb terminal that recognizes only those sequences that control basic cursor movement. *Compare with* Intelligent terminal.

U

Utility A short program that performs a routine or one-time-only function. For example, the Export utility in Access converts a file from one format to another so you can use the file in an application program different than the one in which you created the file.

W

Window The portion of the screen where you view information. In Access, you can have up to eight windows. You can also assign different communications lines to different windows.

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Instructions

Use this form to report software bugs, documentation errors, or suggested enhancements. Mail the form to Microsoft.

Category

_____ Software Problem _____ Documentation Problem
_____ Software Enhancement (Document # _____)
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Software Description

Microsoft Product _____
Rev. _____ Registration # _____
Operating System _____
Rev. _____ Supplier _____
Other Software Used _____
Rev. _____ Supplier _____

Hardware Description

Manufacturer _____ CPU _____ Memory _____ KB
Disk Size _____" Density: _____ Sides: _____
Single _____ Single _____
Double _____ Double _____
Peripherals _____

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Describe the problem. (Also describe how to reproduce it, and your diagnosis and suggested correction.) Attach a listing if available.

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